Not on reader 1/83

UNITED NATIONS

ECONOMIC AND SOCIAL COUNCIL

Distr.
GENERAL

E/CN.14/758
ECA/CONF/LDCs/4
28 January 1980

Original: ENGLISH

ECONOMIC COMMISSION FOR AFRICA

Conference on the Problems and Prospects of the Least Developed African Countries

Addis Ababa, 17-22 March 1980

ECONOMIC COMMISSION FOR AFRICA

First meeting of the Technical Preparatory Committee of the Whole

Addis Ababa, 3-8 April 1980

ECONOMIC COMMISSION FOR AFRICA

Fifteenth session of the Commission/
Sixth Meeting of the Conference of Ministers

Addis Ababa, 9-12 April 1980

THE PRESENT STATE AND DEVELOPMENT PROSPECTS OF LEAST DEVELOPED AFRICAN COUNTRIES:

An Assessment of the Major Sectors

E/CN.14/ATRDI

M80-402

TABLE OF CONTENTS

		Page
INTRODUCTION		1
PART I:		
PRESENT STATE AND DEVELOPMENT PROSPECTS OF AFRICAN LEAST DEVELOPED COUNTRIES BY MAJOR SECTORS		
A:	DEMOGRAPHIC PATTERNS AND TRENDS	4
B:	AGRICULTURE	
	(a) Development performance	9
	(b) Land availability, productivity and the use of modern inputs	10
	(c) Other factors inhibiting agricultural development	14
	(d) Nutrition and self-sufficiency in food	14
	(e) Prospects for agriculture in the least developed countries	15
C:	MANUFACTURING	
	(a) Pattern of the manufacturing industry	16
	(b) Trade in manufactures	19
	(c) Review of strategies and policies of manufacturing development in the least developed countries	19
D:	MINERALS, ENERGY AND WATER RESOURCES	
	(a) Minerals	21
	(b) Energy	23
	(c) Water resources	23
E:	SCIENCE AND TECHNOLOGY	24
F:	THE EXTERNAL SECTOR	
	(a) Foreign trade pattern	24
	(b) External flows	27
G:	ECONOMIC CO-OPERATION	30
H:	TRANSPORT AND COMMUNICATIONS	33
I:	HUMAN RESOURCES: EDUCATION, EMPLOYMENT, INCOME DISTRIBUTION AND MASS POVERTY	
	(a) Introduction	35
	(b) Education and training	35
	(c) Labour and employment	38
	(d) Income distribution and mass poverty	39

TABLE OF CONTENTS (Cont'd)

Page

PART II:

PROPOSALS FOR ACTION IN THE 1980s

A: AGRICULTURAL DEVELOPMENT 44

B: MANUFACTURING 44

C: MINERALS, WATER RESOURCES AND ENERGY 45

D: SCIENCE AND TECHNOLOGY 46

E: EXTERNAL TRADE AND FINANCIAL FLOWS 47

F: ECONOMIC CO-OPERATION 49

G: TRANSPORT AND COMMUNICATIONS 50

H: HUMAN RESOURCES: EDUCATION, EMPLOYMENT, INCOME DISTRIBUTION AND MASS POVERTY

(a) Education and training 50
(b) Labour and employment 51
(c) Income distribution, mass poverty and basic needs 52
(d) Integrated rural development 53

INTRODUCTION

1. This paper has been prepared mainly to provide background information on the present structural patterns and major resource bottlenecks of the economies of the African least developed countries and to indicate, on the basis of these patterns, the priority areas where action and support are needed to meet the objectives and requirements of the Substantial New Programme of Action for the 1980s for the least developed countries.

2. The detailed elements of the Substantial New Programme of Action for the 1980s should be based on the analysis of the special circumstances of the least developed countries both as a group and on an individual country basis. This is particularly important since, while as a group these countries are known to share a number of structural characteristics, generalizations about them are risky and can easily be misleading. The common characteristics need to be substantially amplified and the degree to which they obtain in the individual countries also needs to be clearly defined.

3. The following have been in UNCTAD document TD/240 as the general structural features of the least developed countries:

(a) very low per capita income with the bulk of the population far below the minimum standard of basic needs;

(b) very high proportion of the population in the subsistence sector;

(c) extremely low agricultural productivity and weak agricultural support institutions;

(d) extremely low level of exploitation of natural resources, minerals, energy, water, etc. (because of lack of knowledge or lack of financing and skills for their development);

(e) very limited development of manufacturing industry;

(f) extremely low level of per capita exports and, even with aid flows, very limited absolute availabilities of imports;

(g) acute scarcity of skilled personnel at all levels;

(h) heavy dependence on expatriates in trade and other service sectors;

(i) very weak institutional and physical infrastructure of all kinds (including administration, education, health, housing, transport and communications, etc.);

(j) one or more major geographical or climatological handicaps, such as land-lockedness, drought and desertification or high exposure to flood or disaster.

4. A considerable amount of work has already been accomplished and more is under way within ECA and the specialized bodies of the United Nations including in particular UNCTAD, as well as in the individual countries themselves on the elaboration of these bottlenecks, and the stock of knowledge and information now available on the least developed countries is quite substantial. The process of analysis and data construction is however far from complete while available data and material have yet to be put into a coherent and comprehensive whole.

5. Given the nature of existing information and the usual constraint of the size of a background conference document as well as time and resource constraints, this paper is no more than a brief summary of existing data and material on the major sectors of the economies of the African least developed countries as a group. Not all the sectors are covered nor are individual countries singled out for detailed consideration. Use has been made of the data and information available in the ECA secretariat supplemented by the various studies prepared by UNCTAD as well as information on particular sectors provided by relevant United Nations agencies.1/ It is hoped that this paper will form the basis for discussion and recommendations for the elaboration of the Substantial New Programme of Action for the 1980s.

6. This paper should be read in conjunction with other documents submitted to the Conference on the Problems and Prospects of the Least Developed African Countries and in particular document ECA/CONF/LDCs/2 entitled "Long-term development trends in the Least Developed African countries"; document ECA/CONF/LDCs/3 entitled "Quantitative analysis of the problems and perspectives of the African least developed countries in the framework of the Third United Nations Development Decade"; and the document prepared by UNCTAD of the Comprehensive New Programme of Action for the Least Developed Countries: an Assessment of the Development Potential and Assistance Requirements of the Least Developed Countries to mention only a few.

7. The paper is divided into two parts. Part I is a sector-by-sector analysis of the present state and potential of the African least developed countries. The main features of the sectors are outlined with special reference to existing bottlenecks and prospects for development. Part II of the paper outlines some proposals for action in the light of the structural features outlined in part I and within the framework of the Substantial New Programme of Action for the 1980s. They also fall within the framework of the Development

---

1/ Use was made in particular of the studies prepared by the various United Nations agencies and bodies for the Meeting of the Group of High-level Experts on the Comprehensive New Programme of Action for the Least Developed Countries, (Geneva, 26-30 November 1979).

Strategy for Africa for the Third Development Decade adopted by the ECA Conference of Ministers at its fifth meeting held at Rabat in March 1979.

8. The over-all principle of the strategy is self-reliance and self-sustainment. The strategy recognized that countries have been following traditional development patterns, which themselves create acute difficulties in the countries concerned, and that development in Africa must be based on the establishment of "self-sustaining, internally, located processes of growth." On this general principle then, the broad objectives for development would be:

- self sufficiency in food
- establishment of a sound industrial base
- physical integration of the region
- control over natural resources
- beneficial and equitable international relations
- substantial increase in intra-African trade

9. To attain these objectives, apart from specific sectoral policies the document indicated the need for a large-scale manpower development programme since this was a critical bottleneck in Africa; the strengthening of regional and subregional co-operation institutions to make them able to implement priority programmes and projects; and the development of new forms of international co-operation. Effective political commitment by African States to the goal of the strategy was seen as crucial to translate the objectives into realities. At the same time, it was recognized that a similar political commitment was necessary on the part of developed countries.

PART I

PRESENT STATE AND DEVELOPMENT PROSPECTS OF AFRICAN LEAST DEVELOPED COUNTRIES BY MAJOR SECTORS

A. DEMOGRAPHIC PATTERNS AND TRENDS

10. Collectively, the 20 African least developed countries comprise 123 million inhabitants or 30.4 per cent of the total population of developing Africa as a whole in 1975 of 405 million. Individually, however, these countries differ remarkably in terms of total population size and density.

11. Generally the least developed countries have relatively small populations, Ethiopia being the largest with 26.8 million people in 1975 and the Comoros the smallest with 0.3 million. The mean for the group as a whole is 6.7 million people. Population density per km^2 varies from 1 in Botswana to 159 in Rwanda with a mean of about 41.

12. The population growth rates of the various least developed countries and life expectancy at birth are fairly homogeneous. The mean growth rate is 2.5 per cent which is not much different from the estimated average annual population growth rate of 2.7 per cent for developing Africa as a whole during the 1970 to 1975 period. At the present rate, the population in the least developed countries as a whole will double every 29 years. Of course, there is considerable variation in this regard. With a growth rate ranging from 1.8 per cent in Botswana to 3.1 per cent in Uganda it would take 43 and 22 years respectively for the population to double in these two countries. The mean life expectacy at birth for the group as a whole is 42 years which approximates the 46 years estimated for developing Africa as a whole.

13. Other characteristic traits of the population are the dominant proportion of children under 15, and a potential labour force of just over half of the total population. While the former implies heavy expenditures on education and an unfavourable dependency burden, the second places a heavy burden on [illegible] half of the total population to maintain the children and the old members of the population.

14. The quality of data regarding the components of population change such as fertility, mortality and migration is very poor in most African countries. However, the available estimates show that the African least developed countries and indeed developing Africa as a whole, have the highest fertility and mortality rates together with the associated rates of natural increase. For the twenty African least developed countries as a whole, the crude birth rates and the crude death rates were 45.9 per 1,000 and 20.3 per 1,000 respectively in 1975 compared with the corresponding figures for developing Africa of 47.5 per 1,000 and 18 per 1,000. These imply annual natural rates of increase of approximately 2.6 per cent and 3 per cent for the 20 least developed countries and developing Africa as a whole respectively, assuming that the problem of migration is a negligible component of over-all population growth. This is not implausible assumption since the ratio of net migration to the total population of these countries is small.

Table 1. Estimates of crude birth rate, crude death rate, infant mortality rate and net migration for least developed African countries

Region/ country	Crude birth rate 1975	Percentage change in fertility 1960/ 1975	Crude death rate 1975	Infant mortality rate 1978	Estimate of net migration	
					Estimate	Period
North a/	42.0	-10.4	13.4	128	na	
Sudan	47.5	-3.7	15.7	141	na	
West a/	48.5	-1.6	21.0	158	na	
Benin	48.6	-3.2	20.8	145	na	
Cape Verde	29.6	-34.9	11.8	105	-26,455(1%)	1965/1975
Gambia	43.0	0.2	22.9	165	20,000(0.4%)	1963/1973
Guinea	46.1	-2.5	20.7	175		
Mali	49.4	0.0	24.0	188	264,000(4.4%)	1960
Niger	51.7	-1.3	24.1	200	na	
Upper Volta	47.9	-3.6	24.8	182	-213,923(3.5%)	1975
Central a/						
Central African Republic	43.0	-5.9	20.3	190	na	
Chad	44.0	-2.2	22.8	160	na	
East a/	48.1	-2.7	19.0	146	na	
Burundi	47.3	-0.9	21.3	150	na	
Comoros	44.5	-7.7	19.5	160	1,361(0.1%)	1970/1975
Ethiopia	48.7	-3.6	24.8	162	126,959(0.05%)	1965/1975
Somalia	48.3	1.0	20.0	177	-474(0.0%)	1970/1975
United Republic of Tanzania	49.3	-2.4	18.0	167	26,801(0.04%)	1965/1970
Malawi	46.3	-6.7	21.1	142	70(0.0%)	1959/1963
Rwanda	51.3	-0.2	21.9	133	293(0.0%)	1965/1970
Uganda	44.7	-2.2	14.3	160	149,270(0.2%)	1965/1975
South a/	43.2	0.5	14.5	119	na	
Botswana	47.9	4.1	20.1	97	na	
Lesotho	40.1	7.2	17.9	114	na	
Mean	45.9	-3.4	20.3	156	-	
All Africa a/	47.5	-4.2	18.0	147	na	

Source: 1978 World Population Data Sheet, Population Ref. Bureau Inc.

a/ These values refer to means of all the countries per subregion in 1975.

na - not available.

15. Infant mortality rates are also relatively high with a mean of 156 infant deaths per 1,000 live births in the African least developed countries as compared with a mean of 147 for all of Africa and a range of 119 for southern Africa and 164 for Central Africa

16. Even though the data shown in table I may be somewhat unreliable, the available information on trends shows an over-all mean decline in fertility of 3.4 per cent for the 20 least developed countries as a whole during the period 1960 to 1975 despite the fact that Lesotho and Botswana experienced increases of 7.2 per cent and 4.1 per cent respectively. The highest decline was noted for Cape Verde with a negative 34.9 per cent while the lowest was for Rwanda with a negative 0.2 per cent. Mali experienced no change in its crude birth rate level during the period.

17. In order to make some tentative suggestions as to which socio-economic variables can be manipulated by policy so as to reduce the high levels of the population growth for these LDCs, attempts were made by the ECA secretariat to correlate changes in the crude birth rates, crude death rates and infant mortality rates with such factors as the proportion of the population in subsistence agriculture, literacy rates, per capita income and rates of urbanization.

18. Based on the results of a multiple regression analysis, it was found that the infant mortality rate significantly influenced crude birth rates for the African least developed countries and as these countries reduce their infant mortality rates in the course of socio-economic development, there may be a fall in their currently high fertility levels.

19. In the case of the crude death rate, the results inferred that declines in the over-all mortality level were effected first by increasing per capita GDP, raising the level of literacy, and increasing the urbanization rates, and second by declines in the crude birth rate. These four should indeed form an integral part of the population policy in these countries aimed at reducing the level of mortality in the total population.

20. Finally, any acceleration in the rate of decline in the existing high infant mortality rate implied an increased literacy rate coupled with improved standards of living for the population through increased per capita income.

21. Population projections made by the United Nations Population Division and which assume a quasi age-structure as at 1975, a declining fertility rate from 1980 onwards according to a 50-year transition model developed for African countries, and a declining mortality rate from 1950 2/, indicate that the population of the least developed countries will continue to grow at about the same momentum until the year 2000 given a mean annual growth rate of 2.57 per cent from 1975 to 1980 as against 2.46 per cent growth rate from 1995 to 2000 (see table 2). The general rise in the size of the potential labour force age group (i.e. ages 15 to 64) during the period 1975 to 2000 also implies that will worsen the employment situation since labour supply already outstrips demand in the least developed countries (see table 3).

2/ For details of the specific assumptions used in the projections for each country, see the same source as table 4.

Table 2. Projected total population (medium variant) for the least developed countries of Africa 1975-2000 (in thousands)

Region/country	1975	1980	1985	1990	1995	2000
North a/	93 234	107 315	123 579	141 853	161 490	181 918
Sudan	16 015	18 371	21 153	24 395	28 083	32 223
West b/	120 936	140 916	165 004	193 189	225 459	261 265
Benin	3 043	3 530	4 127	4 828	5 632	6 529
Cape Verde	298	324	351	378	403	427
Gambia	524	603	686	783	893	1 012
Guinea	4 416	5 014	5 700	6 471	7 318	8 214
Mali	5 807	6 646	7 648	8 825	10 160	11 632
Niger	4 587	5 305	6 176	7 208	8 391	9 670
Upper Volta	6 074	6 908	7 900	9 060	10 373	11 814
Central c/	46 613	52 961	60 329	68 563	77 338	86 041
Central African Republic	2 201	2 475	2 786	3 125	3 477	3 819
Chad	4 030	4 524	5 124	5 848	6 684	7 614
East d/	115 291	133 551	155 665	181 372	210 571	242 780
Burundi	3 934	4 512	5 203	5 991	6 869	7 832
Comoros	300	335	373	401	425	445
Ethiopia	28 770	32 601	37 271	42 639	48 707	55 347
Somalia	3 170	3 645	4 214	4 843	5 525	6 260
United Republic of Tanzania	15 393	17 934	21 057	24 757	29 020	33 794
Malawi	5 250	6 162	7 290	8 628	10 179	11 928
Rwanda	4 120	4 797	5 631	6 613	7 745	9 009
Uganda	11 337	13 201	15 478	18 149	21 206	24 607
South e/	28 767	33 012	37 828	42 999	48 400	53 964
Botswana	716	821	952	1 101	1 272	1 439
Lesotho	1 192	1 341	1 512	1 700	1 896	2 089
All Africa f/	404 841	467 756	542 405	627 976	723 258	825 698

Source: United Nations Population Division Demographic Estimates and Projections for the World, Regions and Countries as assessed in 1978

a/ For all seven countries.
b/ For all 17 countries.
c/ For all nine countries.
d/ For all 18 countries.
e/ For all five countries.
f/ For all 56 countries.

22. Many African Governments realize that national development objectives could be jeopardized by rapid population growth rates and as such must design plans of action to modify existing population trends in the interests of national objectives and national welfare.

23. As Stamper notes in his review of development plans of 60 countries including eight African least developed countries, 3/ the development plans of countries experiencing rapid population growth should take into account demographic changes in population size, age structure and distribution. These three prerequisites together imply the utilization of eight demographic parameters, namely the rate of growth, projections of future population size, future school-age population and future working age population, estimates of fertility, mortality, current school-age population. All eight of these demographic indicators must be prominent in future development plans if action is to be taken to contain the rapidly growing population of the least developed countries . Indeed, educational planning by its very nature is one of the longest range planning functions for a development strategy. Its long lead time necessitates population projections for realistic planning of classrooms and teachers. Also working-age population projections are the principal component of labour force projections and should therefore be given priority.

24. In order to reduce the relatively high rates of fertility and mortality some African countries are now beginning to turn to health education to improve nutrition and sanitation, maternal and child care; vocational education to improve agriculture, stimulate industrialization, and increase management and manpower resources; general education to free women from their traditional roles and to make society more egalitarian, and sex and family-life education to teach children how to accommodate to a rapidly changing society.

25. ECA, on the other hand, has been creating increased awareness of the short and long-term issues relating to different aspects of population structure, movements and changes among African Governments, and has been assisting them in the formulation and implementation of effective population policies and in the integration of the population aspects in the process of their development planning. Assistance is also being given in the development, testing and application of demographic research techniques in the context of African development, and in the study and evaluation of factors accounting for demographic growth rates and structures.

3/ Stamper, G.M., Population and planning in developing nations (The Population Council, 1977).

Table 3. Estimated population proportion (medium variant) by major age groups (1975-2000) (percentage)

Region/country	1975		1985		2000	
	0-14	15-64	0-14	15-64	0-14	15-64
North a/	44.0	52.6	42.6	54.1	38.8	57.4
Sudan	43.8	53.4	44.4	52.6	43.1	53.6
West b/	46.0	51.4	46.8	50.6	45.1	52.1
Benin	45.7	51.6	46.7	50.5	45.2	51.9
Cape Verde	40.6	55.9	32.1	64.0	26.2	66.4
Gambia	44.2	52.9	44.6	52.5	43.2	53.7
Guinea	43.1	54.0	43.8	53.1	41.0	55.5
Mali	45.0	52.3	45.7	51.5	44.5	52.6
Niger	46.5	50.9	47.2	50.2	46.0	51.4
Upper Volta	44.2	52.9	44.9	52.2	43.7	53.2
Central c/	43.0	53.7	43.7	53.0	40.0	56.4
Central African Republic	40.6	55.5	41.9	54.1	37.9	57.8
Chad	41.7	54.7	42.8	53.6	43.1	53.2
East d/	45.4	51.8	46.2	51.0	44.3	52.7
Burundi	43.6	53.4	44.7	52.2	43.4	53.4
Comoros	44.4	52.8	40.7	56.3	28.1	67.8
Ethiopia	44.9	52.4	45.4	52.0	44.0	53.2
Somalia	45.0	53.0	45.0	52.8	42.6	54.7
United Republic of Tanzania	45.4	51.5	46.4	50.5	45.0	51.8
Malawi	47.2	50.3	48.2	49.3	46.7	50.7
Rwanda	46.0	51.2	47.2	50.0	45.8	51.4
Uganda	44.8	52.1	45.6	51.2	44.1	52.6
South e/	41.9	54.0	41.9	54.0	37.1	58.3
Botswana	49.4	47.7	50.0	47.3	43.9	53.8
Lesotho	40.4	55.3	41.2	54.4	37.3	58.1
Developing Africa	44.8	52.2	45.0	52.0	44.3	52.7

Source: As for table 2.

a/ to f/: As for table 2.

B. AGRICULTURE

(a) Development performance

26. During the period 1970-1978, growth in this sector has been extremely poor for African least developed countries with an average annual rate of a mere 1.5 per cent compared with 1.6 per cent for developing Africa as a whole. This is quite disheartining considering that the over-all population growth for this group of 20 countries is around 2.5 per cent per annum and especially so considering that agriculture constitutes the largest sector of the economies of African least developed countries in terms of both the numbers employed in the sector and its absolute share in total GDP. In 1978, 81.5 per cent of the economically active population in Africa's least developed countries was involved in agriculture-related pursuits while the share of the sector's output in total GDP was 43, 50.8 and 34.3 per cent for the island, land-locked and other least developed countries respectively.

27. There were wide disparities in the growth performance of the various countries. Out of the 20 least developed countries in Africa, four registered negative growth rates in this sector during the period 1970-1978, two registered a growth rate of between 0 to 1 per cent, four growth rates of between 1 to 2 per cent, four growth rates of 2 to 3 per cent, and the remaining six countries had growth rates of over 3 per cent.

28. Of course, the poor performance of this sector in the majority of the African least developed countries can be partly attributed to such factors as the low levels of agricultural investment over the past two decades and the impact of the drought during the 1970s.

(b) Land availability, productivity and the use of modern inputs

29. In most African least developed countries, the ratio of the area of arable land to total land is extremely small. This is particularly true of Somalia (1.7 per cent), Botswana (2.3), the Sudan (3.2 per cent) and Chad (5.6 per cent). In others, the ratio of permanent meadows and pastures to total land area is dominant. The countries that have sizable tracts of land under permanent meadows and pastures are: Botswana (75.2 per cent), Ethiopia (58.7 per cent), Lesotho (82.4 per cent), Somalia (46.0 per cent), the United Republic of Tanzania (50.4 per cent) and the Upper Volta (50.2 per cent).

30. While the share of the least developed African countries in the total population of developing Africa is about 30.4 per cent, their share in total land area is 37 per cent (1.1 million hectares). Thus the average number of hectares per 100 persons in the African least developed countries is larger than the average for developing Africa as a whole. The data given in table 4 on land use patterns show that arable land under permanent crops accounted for 8.2 per cent of the total land area in the least developed countries compared with 7 per cent for developing Africa as a whole. The percentages of total land area under permanent meadows and pastures and forest and woodland were 28.5 per cent and 17.6 per cent respectively compared with 26.9 per cent and 21.5 per cent for developing Africa.

31. The available information on land use and allocation patterns on a per capita basis reveals that Burundi, Cape Verde, Lesotho, Rwanda, Somalia, the United Republic of Tanzania and the Comoros have less hectares per 100 population. On the other hand, countries with high arable land/population ratios are also those with sizable tracts of other types of land 4/. This is particularly true of Botswana, the Central African Republic, Chad, Mali and the Niger.

32. It must however be stressed that land size and arable land per capita should not be considered the only viable yardstick for measuring the strength of the agricultural sector. Consequently, the order of magnitude of the number of tractors in use, the extent of fertilizer consumption, the nature and composition of rural assets such as the number of livestock

4/ "Other land" includes unused but potentially productive land, built-on areas, wasteland, parks, ornamental gardens, roads, lanes, barren land, etc. (See FAO Production Yearbook, vol. 32, 1978).

Table 4. Some indicators of land and agricultural performance of African least developed countries

		Year	African least developed countries a/	All developing Africa
1.	Total land area (hectares)	1977	1 096 585	2 964 612
2.	Percentage of total land area under: Arable and permanent crops		8.2	7.0
	Permanent meadows and pastures		26.5	26.9
	Forest and woodland		17.6	21.5
	Other land		45.7	44.6
3.	Hectares per 100 of population	1977		
	Total land area		879	706
	Arable land and permanent crops		72	50
	Permanent meadows and pastures		250	190
	Forest and woodlands		155	152
	Other land		402	315
4.	Agricultural production (annual growth rates)	1970-1978	1.5	1.6
5.	Share of agriculture in GDP	1978	44	23
6.	Percentage of economically active population in agriculture	1978	81.5	66.7
7.	Cereals: Yield per hectare in kilogrammes	1978	800	988
8.	Cereals: Yield per hectare as percentage of world average	1978	38.1	47.1
9.	Tractors in use	1977	28 630	429 042
10.	Tractors in use as percentage of world average	1977	0.15	2.3
11.	Cattle (thousand)	1978	90 340	168 864
12.	Sheep (thousand)	1978	69 270	168 529
13.	Export growth rates per annum	1970-1978	3.3	3.3
14.	Import growth rates per annum	1970-1978	5.2	8.0
15.	Food production indices 1969-71 = 100	1978	n.a	123
16.	Projected growth in agricultural output at 1970 prices	1980-1990	2.2	1.75

Source: FAO: Production Yearbook, vol. 32, 1978, and various publications.

become extremely crucial. However, rural assets should be interpreted with a great deal of caution. For instance, tractors in use merely reflect total numbers and do not indicate quality, age, horse-power and depreciation value. Similarly, the number of livestock does not take into account the quality of herds. Even more important is the distribution pattern of the different types of rural assets which has a far reaching impact on the distribution of income in the rural areas.

33. Table 5 reveals that the number of tractors in use in African least developed countries is abysmally low and accounted for 6.6 per cent and 0.15 per cent of the African and world averages respectively in 1977. A few countries (Botswana, Ethiopia, Malawi, Somalia, the United Republic of Tanzania, the Sudan and Uganda) possess a relatively large number of tractors compared to the other least developed countries. As regards livestock, it appears that with very few exceptions many African least developed countries are endowed with large herds of cattle compared with other African developing countries. For instance, the cattle, sheep and goats in African least developed countries accounted for 53.5 per cent 41.1 per cent and 52.6 per cent respectively of the total for developing Africa in 1978.

34. The use of fertilizers per hectare of harvested land was under 5 kilogrammes in 1975 for the least developed countries, against 14 for developing Africa as a whole. While many countries consumed less than 1 kilogramme per hectare, only two countries of the least developed group, were close to the average for developing Africa (Botswana; and the Sudan with 13 kg). Apart from the general low level of fertilizer consumption, Governments encourage the use of fertilizer mainly for export crops.

35. As regards irrigated area, African least developed countries had about 2,005,000 hectares of land, compared with 7,769,000 hectares for developing Africa as a whole. Comparing this with their share of 37 per cent of total land area, it seems that the proportion of irrigated area to total area is significantly lower than in developing Africa as a whole.

36. Areas of irrigated land per capita for selected countries are given in table 5. It seems that while the land/man ratio in the least developed countries is better than the average for African developing countries as a whole, in terms of irrigated areas the ratio is lower. This is also true for the consumption of fertilizers, which is particularly reflected in the very low yield of cereals per hectare of land. For instance, while the average yield of cereals per hectare of land was 988 kilogrammes for developing Africa as a whole in 1978, only Burundi, the Comoros, Malawi, Rwanda and Uganda exceeded the African average.

37. It has been found that the elasticity of output to labour is higher than that for acreage in both least developed and non-least developed African countries although the richer the country the higher is the ratio of the elasticity of labour compared with the elasticity of acreage. Thus it seems that, although in African least developed countries the expansion of acreage assumes more importance relative to other developing African countries with a higher per capita income, the elasticity of labour for the expansion of output is still

Table 5: Yield inputs and livestock population in African least developed countries

	Cereals: yields per hectare in kilogrammes (1978)	Tractors in use (1977)	Fertilizer consumption per hectare of arable land (kgs.) (1975)	Irrigated area per capita population (1977)	No. of cattle (thousand) (1978)	No. of sheep (thousand) (1978)	No. of goats (thousand) (1978)	Consumption of total fertilizers (metric tons) (1977)
Benin	719	94	3	N.A.	730	850	850	565
Botswana	586	1 950	13	N.A.	3 000	440	1 150	2 100
Burundi	1 039	8	1	13	808	324	578	759
Cape Verde	600	32	3	N.A.	12	2	22	-
Central African Republic	489	135	2	N.A.	6 60	79	588	2 800
Chad	530	145	4	2	4 012	2 254	2 254	7 140
Comoros	1 323	N.A.	N.A.	N.A.	76	8	84	-
Ethiopia	863	3 750	4	20	27 500	23 150	17 120	1 400
Gambia	821	72	N.A.	510	275	90	90	81
Guinea	745	72	1	12	1 600	420	385	2 258
Lesotho	870	587	5	N.A.	670	1 720	925	1 500
Malawi	1 228	1 050	N.A.	N.A.	760	88	818	19 700
Mali	887	620	1	150	4 263	5 849	5 629	14 200
Niger	423	72	a/	50	2 990	2 660	4 700	500
Rwanda	1 113	80	a/	2	610	248	682	300
Somalia	510	1 330	7	490	4 000	9 900	16 400	800
Sudan	771	9 300	13	960	16 567	15 670	11 974	23 103
United Republic of Tenzania	819	7 200	6	35	15 272	3 000	4 700	3 821
Uganda	1 146	2 076	a/	N.A.	5 321	1 068	2 144	2 600
Upper Volta	524	57	a/	3	2 000	1 450	2 300	8 500

Source: FAO - Production Yearbook, op. cit.

a/ Less than one kilogramme per hectare.

more important relative to acreage. In addition the reclamation of larger tracts of land is naturally an expensive undertaking, and in order to increase labour intensity, and consequently productivity per unit of land and labour, land distribution and reform assume great importance.

(c) Other factors inhibiting agricultural development

38. For the land-locked African least developed countries, their isolation is a serious obstacle to agricultural development. It increases the cost of imported inputs, reduces the profitability of export crops and favours concentration on high value export crops such as coffee and tea as in Burundi and Rwanda, which may lead to mono-culture agricultural development.

39. A number of African least developed countries are in the Sahelian zone and others are entirely or partly in dry or desert areas. This situation raises special problems of irregularity of agricultural production and the need to invest heavily in irrigation infrastructure, as well as imposing limitations on the variety of crops that can be grown.

40. Some of the African least developed countries have high population density relative to cultivated arable land. Such countries include Burundi, Rwanda, Lesotho, Cape Verde and the Comoros and to some extent the Upper Volta, Malawi, Uganda, the United Republic of Tanzania and Ethiopia. In these countries, agricultural development faces a physical obstacle in the form of the lack of available arable lands. The intensification of existing cultivable land in these countries is made difficult by their land-locked position, transport difficulties, poor infrastructure and unavailability of inputs.

(d) Nutrition and self-sufficiency in food

41. Available information reveals that, with an average of 2,064 calories per day, per capita, the population of the least developed countries is 13 per cent below the group of "more developed countries" (2,369) and 9 per cent under the African average of 2,270 calories per day. This African average is influenced by the high calorie intake (2,553) of the North African sub-region. With regard to protein intake, the picture is quite different. Here, the average daily intake in least developed countries (57.3 grams) is exactly the same as the average for the more developed countries and for Africa as a whole. It is lower in coastal countries of West and Central African, irrespective of whether they are in the least developed group or not. In other words, protein intake is more a matter of geographical location. This can be explained by the fact that African countries of the North, Sahelian and Eastern subregions, where the diet is composed mainly of cereals and meat, have a relatively high protein intake, even if their per capita income is relatively low. This situation reflects the relatively abundant supply of grains and livestock in these areas. On the other hand, countries of the west African coast and of Central Africa, where the diet is composed of roots and tubers, have a lower protein intake, except in urban areas when consumers can supplement [illegible] with imported cereals and meat at subsided prices.

(e) Prospects for agriculture in the least developed countries

42. Although the availability of land is the major factor in agricultural production potential, least developed countries should not merely depend upon increasing cultivated areas to step up agricultural production. Efforts should also be devoted to raising yields per hectare, through the use of better varieties, fertilizers and better husbandry and by reducing erosion on lands already cultivated. Only 44 per cent of arable lands are actually being cultivated now and by the year 2000, it is projected that 54 per cent of arable lands will be under cultivation. However, this optimistic picture is somehow dampened by two observations:

(a) The remaining arable lands are probably those which are either of lower quality or more difficult and expensive to develop than areas already cultivated. Therefore, increases in cultivated areas by using existing vacant areas are likely to be less rewarding and more costly than in the past.

(b) Secondly, although the over-all picture is favourable, the figures by group of countries differ widely. Certain land-locked countries - the Central African Republic, Mali, Chad, the Niger, the Upper Volta and Botswana, - even in year 2000 will be cultivating not more than 47 per cent of their total arable lands. This is also true for some coastal countries such as Benin and Guinea. Other countries (Burundi, Rwanda, Lesotho, Malawi and Uganda) are already using more than 75 per cent of their arable lands and will be approaching total use in the year 2000.

43. As regards the production of cereals, the total projected deficit of the least developed countries in year 2000 is not excessive compared with the total deficit for developing Africa as a whole which has been projected to reach 12.3 million tons in 1990 and probably more by the year 2000. This view is based on the assumption that increased efforts will be made to encourage production especially in land-locked least developed countries. In fact, most of the least developed countries are certainly in a better position concerning cereal production and trade than other "more developed" African countries, partly because the least developed group includes a high proportion of cereal producing countries and partly because the least developed countries will enjoy relatively lower rates of economic growth than the "more developed" countries which would dampen the demand for cereals.

44. Total demand for meat is projected to increase faster than production, and therefore imports will increase, exports will decrease, to the extent that there will be virtually no surplus by the year 2000. Here again the situation in the least developed group is better than that of developing Africa as a whole which will have a total meat deficit of 2,412,000 tons in 1990 and probably more in the year 2000. The reasons for this relatively better position of the least developed group is that it includes a great number of livestock producing countries, while the rate of growth of demand for meat will be lower than the rate of growth of demand for meat in the rapidly developing African countries.

45. It would appear that the projected self-sufficiency ratio in cereals is higher for the least developed countries than for the African continent as a whole. The difference would be greater with regard to meat in which the least developed countries will remain self-sufficient as a group, while the African continent will increase its deficit.

C. MANUFACTURING

(a) Pattern of the manufacturing industry

46. Manufacturing output in the African least developed countries is composed of consumer goods such as food processing, beverages, tobacco and textiles. The share of this sector in GDP is much lower in the least developed countries than for other developing African countries, the figures being about 13 per cent and 19.5 per cent respectively.

47. Manufacturing output in the least developed countries accounts for a mere 14.2 per cent of total manufacturing production in developing Africa as a whole. On a per capita basis, output was about $US 7.5 in 1975 or less than half of the manufacturing output per capita in developing Africa as a whole estimated in the same year at $US 15.5.

48. Only five countries accounted for over 70 per cent of the total manufacturing output of the African least developed countries as a whole during the period 1970-1978. In this regard, Ethiopia accounted for 21.5 per cent of the total followed by the Sudan with 18.9 per cent, the United Republic of Tanzania with 16.5 per cent, Uganda with 9 per cent and Malawi with 7 per cent. The remaining countries each contributed an average of 1.8 per cent to the total manufacturing output of the least developed countries as a whole. In terms of the total manufacturing output in all developing Africa as a whole, the five countries listed above account for a mere 8.9 per cent while each of the remaining least developed countries account for a mere 0.35 per cent on average.

49. The extremely low level of per capita income coupled with the very small total population in most of the countries implies that they have a very small domestic market potential. The markets are also characterized by inelasticities of demand owing to the low levels of income and the widespread subsistence sector. This, together with the high cost of transport for domestic and transit trade, substantially reduces the profitability and consequently the levels of savings and investment. It also implies that most of the least developed countries have to establish small-size production units with little economies of scale.

50 More often than not, the degree of fabrication is rather crude and weak and most of the least developed countries are not in a position to increase local processing of their primary commodities beyond certain limits owing to the lack of capital, appropriate skills and technology. According to UNCTAD estimates, the additional gross foreign exchange earnings of developing countries through increased local processing of selected commodities are substantial (see table 6). For the ten primary commodities mentioned in the table, export values can be increased by over 150 per cent on the average with greater local processing. As expected the additional gross foreign exchange earnings from increased local processing vary from one commodity to another. While they are extremely low for coffee (about 4 per cent) and extremely high for bauxite, alumina and aluminium (785 per cent), they are almost 2.5 times for phosphates, more than two times for natural rubber and a little less than two times for cotton and hides and skins.

Table 6. Additional gross foreign exchange earnings of developing countries through increased local processing of select commodities, 1975 (millions of dollars)

Primary commodity		1st processing stage		2nd processing stage		Total additional gross earnings	Ratio of additional gross earnings to value of exports of primary commodities
	Value of exports by developing countries	Product obtained	Additional gross earnings	Product obtained	Additional gross earnings		
Copper (ore blister and refined)	2 865	Refined copper	230	Rods, wire, tube sheets	970	1 200	0.42
Bauxite, alumina, aluminium	1 300	Aluminium ingot	4 400 a/	Semi-manufactures (rolling & drawing)	5 800	10 200	7.85
Phosphate	1 480 b/	Superphosphates	3 800	-	-	3 800	2.56
Natural rubber	1 525	Sheet, plates tubes	1 300	Rubber tyres	2 000	3 300	2.16
Cotton	2 091	Grey cotton yarns in bulk	1 300	Woven finished cotton fabrics	2 600	3 900	1.86
Jute	600 b/	Jute fabrics	80	-	-	80	0.13
Hides and skins	430	Finished leather	800	-	-	800	1.67
Non-coniferous wood	2 045	Plywood, veneer sheets, etc.	3 400	-	-	3 400	1.66
Cocoa	1 605	Cocoa butter and powder	340	-	-	340	0.21
Coffee	3 936	Coffee extracts and soluble coffee	170	-	-	170	0.04
Total	17 977	-	15 820	-	11 370	27 190	1.52

Source: UNCTAD secretariat estimates.

a/ Energy consumption would account for about 40 per cent of additional gross export earnings if value at world export prices of oil-equivalent energy. b/ Includes value of semi-processed products.

51. The pattern of manufacturing in the least developed countries as expected, is based upon their resource endowments. Output is primarily agro-related and thus the expansion and diversification of agriculture is of crucial importance for industrial development. It was the development of the agricultural sector which enabled Malawi substantially to expand its industrial output at average annual rates amounting to over 9 per cent in the 1970s.

52. Unfortunately, despite import substitution strategies the percentage share of imported inputs in the value of output is still very high. Among the industries which have a relatively large import component are tobacco manufacturing, which to a very large extent depends on imported raw tobacco, textiles which require raw cotton and rayon, and fibre bags which need imported jute. If these imported components were manufactured locally, they would help to generate further value added, expand employment opportunities and generate much needed foreign exchange savings. On the other hand, there are some success stories too.

53. During the past two decades, there was little structural change in the African least developed countries. In the 1960s, manufacturing output, which started from a low base, expanded at an average annual rate of about 8.8 per cent increasing the share of manufacturing in GDP from 5.4 per cent in 1960 to 8.7 in 1970. Thereafter the average annual growth of the manufacturing sector substantially decelerated to a mere 3.6 per cent thus, causing the share of manufacturing in GDP to stagnate at 9 per cent during the 1970s. The elasticity of manufacturing output growth with respect to agriculture which amounted to 4.9 in the 1960s, declined in the 1970s to 2.4 which suggests firstly a shift of output from the agro-based industries to other industries and secondly a fall in the growth of manufacturing output not solely attributed to the fall in agricultural growth. The elasticity of manufacturing with respect to over-all GDP growth declined from 2.4 in the 1960s to 1.1 in the 1970s which shows that in the 1970s manufacturing output did not respond to GDP growth rates as fast as in the 1960s. This lack of response might be related to the fact that import substitution policies were not pursued in the 1970s as vigorously as in the 1960s since all types of emergency aid were received in the form of consumer goods.

54. Not only is real <u>per capita</u> manufacturing output in the African least developed countries extremely small but it also rose marginally from $US 7.5 in 1975 to $US 7.7 in 1978 compared with developing Africa as a whole where <u>per capita</u> manufacturing output is more than twice the level in the least developed group and rose faster from $US 15.5 to $US 17.9 in the period in question. While exports of manufactures on <u>a per capita</u> basis remained extremely low at $US 1.7 in 1975 compared with $US 18 for developing countries as a whole, <u>per capita</u> imports of manufactures stood at $US 14.5 in the African least developed countries compared with $US 42.6 for developing countries as a whole in 1975. Thus the trade in manufactures of least developed countries is heavily dominated by imports rather than domestic output and exports, and the limited exported commodities are mainly raw materials with little processing.

(b) Trade in manufactures

55. During the years 1970 to 1975 exports of manufactures in volume terms declined seriously in African least developed countries at an average annual rate of 17.3 per cent and in other developing countries at an average annual rate of 14.7 per cent. On the other hand, imports of manufactures by African least developed countries declined at an average rate of 1.. per cent yearly and rose at an average annual rate of 7.8 per cent for other African developing countries. The decline in the least developed countries is probably due to the relative scarcity of foreign exchange and the consequent fall in purchasing power and volume of exports.

56. Of course, the trade in manufactures of African least developed countries is heavily dominated by imports. According to estimates by UNIDO, the export-trade ratio (equivalent to the self-sufficiency ratio) declined from 6.7 per cent in 1970 to a mere 5.6 per cent in 1975. The corresponding ratios for developing countries as a whole are 25 per cent and 21.6 per cent respectively 5/.

(c) Review of strategies and policies of manufacturing development in the least developed countries

57. Many least developed countries have adopted investment codes which provided specific incentives to promote import substitution and the processing of raw materials to earn additional gross foreign exchange earnings. This policy has succeeded in some countries and enabled them to exploit their abundant labour and raw materials. Benin, for example, with its large vertically integrated textile mills, was able to capture part of the textile market in the Federal Republic of Germany. However, in a number of other countries this policy has been seriously constrained both by domestic and external factors such as increasingly sluggish export markets, difficulties in using appropriate technology, growth of synthetics substitutes and resort to protectionist measures in developed countries.

58. The import substitution policies which were pursued in many African least developed countries and which were designed to improve the balance-of-payments position and provide employment opportunities failed. Behind this failure was the high degree of effective protection which encouraged high costs of production and sales to domestic markets at the expense of exports. Problems of management and efficiency culminated in increasing imports of components with a low level of exports which caused the balance-of-payments position to deteriorate further. With the emergence of foreign exchange shortages, excess capacities emerged. Malawi, in its new industrial programme of 1978, has realized the limitations of import substitution programmes with high levels of tariff protection and has increasingly managed to broaden its export capabilities with foreign

---

5/ UNIDO, Industry in the Least Developed Countries. Recent Developments, Prospects and Proposals for International Co-operative Measures, August, 1979.

participation in large-scale industries like cement, fertilizers and oil refineries.

59. Many least developed African countries introduced new industrial policies in the 1970s to remedy the unfavourable results of the import substitution policies . Rehabilitation programmes were formulated, and industrial promotion boards were established to revive the expansion of industrial production. Mali and Guinea formed production brigades to ensure the regular flow of raw materials needed for the manufacturing sector.

60. Efforts were also made to introduce projects with low capital-labour ratios and less use of energy. More training was given to local skills. In the Upper Volta, the Government encouraged the establishment of small- and medium-size industries to bridge the gap between rural and urban income and to use more of the raw materials available in the country (i.e. increased localization of output).

D. MINERALS, ENERGY AND WATER RESOURCES

(a) Minerals

61. In 1978 mining activities accounted for 1.4 per cent of the total value added in the African least developed countries as a group compared with about 13.4 per cent for developing Africa as a whole.

62. A few of the African least developed countries, namely Botswana, the Central African Republic, Guinea, the Niger, Uganda and the United Republic of Tanzania have important mining sectors. In the case of Botswana and the Niger, the significant rate of economic growth recorded in the past decade has been partly due to developments in this sector. On the other hand, a number of countries, notably Cape Verde, Chad, the Comoros and the Gambia have so far no identified mineral resource base.

63. Despite the heavy concentration of mineral production by country, a fairly wide range of products are mined. Table 7 provides output levels for 16 mineral categories produced by African least developed countries. It is important to note that there are no available data on output in a number of fields - brown coal/lignite, crude petroleum, natural gas, antimoney, lead ore, mercury, molybdenum, vanadium, zinc ore and sulphur.

64. It is also evident from the table that the general pattern for all minerals produced represents a small level of output exhibited, both in relation to world output and to African production levels. In the absence of co-operation among producers this does not enable African countries to impose fair prices. Only in the production of diamonds does output approach 10 per cent of world output. In fact apart from the output of diamonds and uranium (6.5 per cent of world total) the output levels of all categories of minerals are below 2 per cent of total world output.

65. Another feature is that apart from the production of salt, all the other mineral categories are being produced by only a handful of countries. There are four and five least developed countries which produce diamonds and tin respectively. On the other hand, the largest range of minerals are produced by Botswana, Uganda and the United Republic of Tanzania each of which produce five mineral categories. Only four African least developed countries are net exporters of ores and minerals in per capita terms. They are Botswana, Guinea, the Niger and Rwanda.

Table 7. Mineral output of African least developed countries[a/]

	Coal	Natural gas	Uranium	Iron ore	Bauxite	Chronium	Copper	Gold	Magnesite	Manganese	Nickel	Silver	Tin	Tungsten	Salt	Phosphates	Asbestos	Diamond
	1976	1976[b/]	1976[c/]	1976	1976	1976	1976	1976[d/]	1976	1971	1976	1976	1976	1976	1976	1976	1976	1976[e/]
Benin																		
Botswana	224						12.5			14.1	12581							2361
Burundi													100					
Cape Verde															14			
Central African Republic																		286
Chad																		
Comoros																		
Ethiopia								933							38			
Gambia																		
Guinea																		
Lesotho																		2
Malawi																		
Mali															5			
Niger			1460										84					
Rwanda													1200	525				
Somalia															2			
Sudan						11.5		101		0.5					75			
Uganda													120	139	3	15	3	
United Republic of Tanzania	1							2						1	22			450
Upper Volta													86					
African least developed countries-total	225		1460			11.5	12.5	1036		14.6	12581		1540	665	209	15	3	3099
LDCs total	389	31191	1460		739	11.5	12.5	945		14.7	12581	1	2166	665	209	15	3	3099
World total (millions)	2419	1166	122293	512	74.7	3.86	7.8	998	11.6	8.4	801	9.4	179	50	172	117	5.3	28850
African LDCs/ World total	.01	-	6.5	-	-	0.3	0.1	0.1	-	0.2	1.6	-	.8	1.3	0.1	.01	.05	10.7

Source: United Nations Statistical Yearbook, 1977.

a/ Thousands of metric tons and world total in millions unless otherwise noted!

b/ Terracalories.

c/ Metric tons.

d/ Kilogrammes.

e/ Thousand metric carats.

(b) Energy

66. The least developed countries have been particularly badly hit by the continuing increases in oil prices over the past few years. None of the least developed countries produce oil and the growing oil import bills have significantly contributed to their foreign exchange problems. The share of petroleum in the total import content of these countries was on average as high as 10.4 per cent in the years 1977 to 1978 and represented about 16.2 per cent of total export earnings during the same period. In countries like the Upper Volta and the United Republic of Tanzania the cost of oil imports reached as much as 32 per cent and 28.6 per cent of total exports respectively in 1979.

67. It is estimated that about 81 per cent of the total commercial energy consumption of the least developed countries takes the form of liquid fuels. The remainder is equally divided between coal and hydropower. Large quantities of non-commercial fuels such as wood and agricultural wastes are also consumed. On a per capita basis, the average rate of energy consumption in the least developed countries is significantly less than the average for developing countries as a whole. This stems from the relatively low infrastructure levels of industrialization, transport and urbanization.

68. Total installed capacity, while growing, has remained at a low level on a per capita basis in the least developed countries, averaging 12 kilowatts, and is highly concentrated in countries like Ethiopia, Guinea and the Sudan.

69. Only a few countries, including the Sudan, Ethiopia and the United Republic of Tanzania, have any capacity for refining petroleum.

(c) Water resources

70. It is estimated that only 2 per cent of the potential water wealth of the region as a whole is actually being put to productive use. At the same time there is an acute and pressing need for water for over-all development but particularly in respect of food production, improved health, etc. The implications of this in the least developed countries are particularly serious since water supply difficulties are compounded by susceptibility to drought, land-locked positions and other physical handicaps.

71. Recommendations were made by the African Regional Meeting on the problems of water resource development in Africa held in September 1976 concerning activities in the water resources sector for the 1980s for the least developed countries. Among the major recommendations for the 1980s were proposals for the assessment of water availability; drinking water supply; water for agriculture, industry, power and transport; drought and floods; pollution control; planning and policy formulation, regional and international co-operation; capital and manpower needs; and institutional and organizational aspects.

E. SCIENCE AND TECHNOLOGY

72. Technological capability in the African least developed countries is at present very low and the framework for technology policies is inadequate and structurally weak. Most countries depend almost entirely on foreign sources of technology. Besides being costly to acquire, imported technology is often ill-suited to the needs and circumstances of the least developed countries.

73. A number of countries have established national councils and institutions for science and research. However, there is still a heavy reliance on foreign research and development facilities. This is particularly true in the field of industry.

74. In the areas of manpower and training, there are serious shortages of persons who combine engineering and agricultural expertise with the skills of managers, industrial designers, production and process engineers, engineering draftsmen, food technologists, quality control personnel, management accountants, to name but a few.

75. To a great extent the weaknesses in the technological capabilities of the least developed countries are due to the fact that in most countries the possibilities of policy as an instrument of development are only implicitly perceived. Few countries have explicitly translated technological policy formulated within the whole institutional framework of government policy making and economic planning into a plan of action for strengthening their technological capability.

F. THE EXTERNAL SECTOR

(a) Foreign trade pattern

76. In 1977 the exports of African least developed countries amounted to about $US 3,622 million or 7.6 per cent of total exports of developing Africa. With the least developed countries accounting for about 30.8 per cent of the total population of developing Africa, the level of exports on a per capita basis is extremely low, being a mere $US 29 or about one third of the average achieved by the non-oil-exporting African countries and only a quarter of the average for the African region as a whole. Exports are almost entirely composed of primary commodities and, under the SITC classification, 91 per cent of all exports belong to the categories of food and live animals, beverages and tobacco, non-fuel crude materials and animal and vegetable oils and fats. For developing Africa as a whole, only 28.5 per cent of total exports fell into these categories, while for the African non-oil-exporting and non-least developed countries, the corresponding proportion was only 55.3 per cent. Furthermore, the exports of the African least developed countries are concentrated on only a few primary commodities with two or three products providing the bulk of all exports in the majority of cases. Thus for 15 African least developed countries, excluding the countries in southern Africa and the two island countries, coffee alone accounted for 38.2 per cent of all exports in 1976/1977, while cotton accounted for 19.5 per cent and groundnuts, oil seeds and palm products 6.6 per cent.

77. The developed market economies receive about 63.4 per cent of the total exports of the African least developed countries with EEC being the main market and acquiring 41.5 per cent of the total exports. In 1975, intra-African trade accounted for 13.4 per cent of the total exports of the least developed countries compared with the regional average of only 5,4 per cent. A substantial proportion of the trade of most least developed countries with neighbouring countries is unrecorded, particularly in the Sahel region.

Table 8. Commodity exports

	Least developed	Non-oil-exporting other Africa	Developing Africa
Value 1977 (millions of United States dollars)	3 622	16 690	47 663
Growth 1970-1977			
Current prices	14.4	12.9	18.4
Purchasing power a/	2.6	1.0	6.5
Value per capita (1977)			
Commodity structure (1970) (percentage)			
0 + 1 food and beverages	42.4	28.8	14.9
2 + 4 raw materials, fats and oils	48.9	28.7	13.6
3 mineral fuels	2.8	18.6	62.3
Others	5.9	23.91	9.2
Exports by destination (1975) (percentage)			
Developed market economies	63.4	71.4	78.3
Developing market economies	29.7	15.8	14.9
Africa	13.4	9.7	5.3
Centrally planned	6.9	12.7	6.6

Source: International Financial Statistics and Statistical Yearbook, 1979.

a/ In 1975 prices (import index published by IMF).

78. In current terms, exports of African least developed countries grew relatively fast at 14.4 per cent per year on average between 1970 and 1977. This was faster than the growth of exports from the non-oil-exporting African countries which grew at 12.9 per cent but lower than the 18.4 per cent growth rate for the total exports of developing Africa as a whole during the same period. The performance of the African least developed countries was almost entirely due to the large increases in coffee prices in 1976 and 1977. However, purchasing power in terms of import prices grew by only 2.6 per cent during 1970-1977, a rate which is again greatly influenced by the high coffee prices in 1976 and 1977. Prior to the exceptional increases in coffee prices and during the period 1970 to 1975, the purchasing power of the least developed countries exports declined by 5.4 per cent a year on average. On a per capita basis, the rate of decline was 3 per cent per year.

79. Total imports of African least developed countries amounted to $US 4,780 million in 1978 or 9.8 per cent of the total imports of developing Africa as a whole. In per capita terms, these imports amounted to $US 30 per head, or a third of the regional average.

80. The leading import items are manufactured goods which account for about 59.9 per cent of total imports while food and drinks account for about 16.2 per cent.

Table 9. Commodity imports

	Least developed	Non-oil-exporting other Africa	Total Africa
Value 1977 (millions of United States dollars)	4 780	22 197	48 979
Growth 1970-1977 (percentage)			
Current prices	15.7	17.3	21.2
Constant prices	3.9	5.5	9.4
Imports per capita (1977)	38.0	123	124
Commodity structure (percentage) (1976) (SITC sections)			
0 + 1 Food and beverages	16.2	19.6	16.0
2 + 4 Raw materials	3.5	5.9	5.9
3 Fuels	10.2	12.4	6.8
5 Chemicals	11.2	10.4	9.4
7 Machinery and transport equipment	28.2	26.2	34.4
6 + 8 + 9 Other manufactures	30.7	25.5	27.9
Origin of imports (percentage) (1975)			
Market developed	68.1	75.6	79.3
Market developing	23.4	17.7	14.4
Africa	8.7	5.1	4.0
Centrally planned	8.5	6.7	6.2

Source: IMF, International Financial Statistics and Statistical Yearbook 1979. Foreign trade Statistics for Africa (E/CN.14/STAT/SAIC/1).

81. For the African least developed countries as a whole, imports grew at the average annual rate of 15.7 per cent at current prices and at 3.9 per cent at constant prices. These rates compared with 21.2 per cent and 9.4 per cent respectively for the non-oil-exporting African countries during the same period. There has also been a steady increase in the trade deficit of the least developed countries during the period. No large changes appeared in the structure of imports, although there has been an increase in the share of food and drinks and a decrease in the share of imports of manufactured goods.

82. One of the main determinants of the poor export performance of the African least developed countries, over and above supply constraints, has been the relatively slow growth in the international demand for the primary products of these countries. This weakness has been due to a combination of causes, among them the low population growth in the developed market economies, the low income elasticity of demand for primary products, the substitution policy followed by the developed countries, e.g. the replacement of natural fibres by synthetic ones. Another very important factor has been protectionist policy of some developed countries which have effectively closed their markets to processed goods exported by developing countries.

83. The rise in the costs of imports for the African least developed countries has been due to a number of factors including the fact that many of them are land-locked. This has tended to raise transport costs at a time when higher fuel costs are greatly affecting these countries. The small size of the markets of most of the least developed countries has also played a role in raising import costs since the least developed countries are less able to benefit from bulk buying. To sustain their imports, these countries have been forced to run increased trade and current deficits, partly financed by increasing foreign debt.

84. Although the share of intra-African trade is relatively larger in the least developed countries than in other African countries and although a large part of this trade is well established and has a traditional character particularly as in the case of trade between the Sahel and the coastal countries of the Gulf of Guinea, this trade has not provided the expected contribution. For example, least developed countries exports to other African countries grew at an average annual rate of 11.6 per cent in current terms during 1970-1977 compared with 14.4 per cent for total intra-African exports. There are many factors explaining this situation, among them competition from imports from outside to Africa such as South American meat, poor communication systems and established financial and monetary arrangements which force African traders to operate with convertible currencies.

(b) External flows

85. African least developed countries have been constantly in deficit since 1970 in both their trade and their current balance-of-payments, and the deficit has been increasing. The trade deficit alone grew at an average annual rate of 20.5 per cent during 1970-1977. To finance this increasing deficit the least developed countries had to draw on their reserves and rely more on external assistance. They have had to incur a rising foreign debt at a time when their rate of economic growth was limiting their ability to service foreign debt. During the period 1969-1977 the total debt of African least developed countries increased more than fourfold to reach $US 5.4 billion.

The level of external debt increased at an annual rate of 20.3 per cent per year while GDP in real terms grew only marginally. At the same time debt service payments grew from $US 111 million in 1969 to $US 534.5 million in 1977, a sum which represented 14.5 per cent of total exports. Debt service payments as a percentage of exports of goods and services increased from an average of 5.8 per cent in 1971 to 7 per cent in 1977. Some countries recorded a disturbing pattern, For example, in the Comoros debt service rose from 0.1 per cent to 7 per cent, in Somalia from 2.3 per cent to 10.7 per cent and in Guinea from a high 29.2 per cent in 1971 to an estimated 43.5 per cent in 1977.

86. Table 10 provides data on external financial flows to African countries. In the period 1970-1977 financial flows to African least developed countries grew at a lower rate than flows to other developing African countries. Total financial flows to African least developed countries grew by 22.2 per cent on average, to reach $US 2.3 billion in 1977, while flows to the non-oil-exporting non-least developed countries grew by 25.1 per cent per year. The average amount of financial flows per capita for African least developed countries was only half the regional average of $US 37. For the non-oil-exporting non-least developed countries it reached 54 dollars per capita. In 1977 concessional aid accounted for 44.5 per cent of total flows into African least developed countries against 52.5 per cent for all developing Africa and 58.1 per cent for other non-oil-exporting countries. None the less the proportion of concessional aid in total aid flows to African least developed countries has dropped since 1970 when it was about 83.6 per cent. Aid to the least developed countries is very inequally distributed. In 1978, total net resource flows to these countries amounted to $US 2 billion out of which $US 983 million went to only two countries. However, DAC countries have greatly increased the grant element of ODA to the least developed countries and in 1978 grants accounted for 82 per cent official aid from DAC countries.

87. If the African least developed countries are to break away from their present stagnation and grow rapidly, then the present level of resource transfers must undoubtedly be raised considerably. As explained in the document entitled "Quantitative analysis of the problems and perspectives of the African least developed countries in the framework of the Third United Nations Development Decade" (ECA/CONF/LDCs/3) under the scenario of a 6 per cent real growth rate in the period 1980-1990 as compared to the 2.3 per cent recorded in the 1970s, the ECA secretariat has estimated that the likely trade and savings gaps would increase substantially for African least developed countries as a whole. It was estimated that if exports could achieve a rate of growth of 7 per cent yearly, the trade gap would reach around $US 1.64 billion in 1990 at 1970 constant prices, or around three to four times the 1975 trade gap, implying that African least developed countries would require substantial external inflows to grow by over 7 per cent per year in real terms. Without such ambitious export growth rates more external flows would be required.

Table 10. Financial flows to developing African countries (in millions of United States dollars)

	1979	1977	Per capita average growth 1977	1970-1977
Total				
Africa	3 090.3	14 668.5	37	22.2
Least developed	485.1	2 286.7	18	22.2
Other a/	1 606.3	9 796.5	54	25.1
Concessional				
Africa	1 659.0	7 702.9	19	21.9
Least developed	405.6	1 016.9	15	21.6
Other a/	1 016.9	5 683.6	32	24.6
Non-concessional				
Africa	1 431.3	6 965.7	18	22.6
Least developed	79.5	443.5	4	24.6
Other a/	669.4	4 102.9	23	25.6

Source: UNCTAD, Handbook of International Trade and Development Statistics, 1979.

a/ Non-oil-producing African countries.

G. ECONOMIC CO-OPERATION

88. The conditions of the least developed African countries are such that co-operation among them cannot give all its benefits outside the framework of co-operation among all African developing countries. Not only are the problems facing the least developed countries qualitatively different from those of other developing African countries, but their geographical proximity and the small size of their economies make it necessary for them to conduct economic co-operation schemes among themselves and other African countries. A good instance of this situation, is CILSS which co-ordinates the Sahel countries' policies for controlling drought and which has at least two non-least developed countries among its members, namely Senegal and Mauritania.

89. Consequently, the evaluation of the present situation of co-operation developed among the least developed countries must be carried out as part of the evaluation of the status of African co-operation at large. This co-operation takes a large number of forms, from the common market/customs union type, to common operation of railways and other lines of communications or other such joint ventures. The number of corporations, organizations and specifically inter-African governmental organizations is growing steadily and according to the ECA secretariat some 75 of such bodies are already in existance.

90. African least developed countries participate in many of these institutions and organizations like UNDEAC and the common central banks of the French-speaking countries of West and Central Africa, and are operating common transport lines with coastal States like the railway linking the Ivory Coast to the Niger. However, despite the creation of the ECOWAS which is scheduled to become a full customs union for West Africa, co-operation has not made as much progress as was hoped and one sign of this is the low growth of intra-African trade. For many least developed countries which are vitally interested in transit trade because of their land-lockedness the situation has worsened in some respects as was shown by the near blockade suffered by Rwanda and Burundi during 1978/1979.

91. Among the reasons for the setbacks suffered in African co-operation are the uneven development of African countries which creates a tendency for investment to concentrate at least initially in those countries which appear to be more developed. In addition, the economies have not changed enough to be complementary and demand remains externally oriented. Moreover, the effects of institutional obstacles to co-operation cannot be underestimated since these obstables are keeping trade below its potential level.

92. The institutional impediments are mainly the financial, monetary, fiscal and other regulations which are isolating each African economy from the others and in this respect, the restrictions imposed on settlement of transactions constitutes the most effective barrier. Such a situation cannot coexist with the development of co-operation among African developing countries, and evidently ways have to be found to remove monetary barriers, not to mention those limiting the movements of manpower and capital. The creation of ECOWAS which is intended to be the first step towards a full common market in West Africa is a hopeful sign. Other positive steps are the establishment of preferential trade areas among African countries, a policy which is advocated by ECA and the Preferential Trade Area for East and Southern Africa.

93. Transport and communications networks among African countries are poor. For the least developed land-locked countries, this leads to high transit costs and dependence on only one or two outlets to the sea ports. Moreover, in addition to low capacity, safe transit is not assured. Evidently the situation can only be rectified through co-operation since the interests of all countries are involved and since the investment required is beyond the capacity of a single State. It is thus necessary to establish common agencies which would both develop and manage intra-African transport. A solution should be found for the equitable sharing of customs duties, the setting of transport tariffs, the safety of goods in transit and other related matters. For a number of years ECA has been sponsoring the trans-African highway project and African countries should give their full support to it. Also, international agreements like the International Road Transport Convention, should also receive the support of African States.

94. In the field of economic co-operation, the least developed countries should be more concerned with co-operation for the development of their agriculture and livestock. In the Sahel region the development of agriculture requires harnessing the river Niger so as to minimize the impact of weather fluctuations on water resources. Such a large undertaking, the capital cost of which would run into hundreds of millions of United States dollars, cannot be completed without the co-operation of all riparian countries. Also for livestock development the system of nomadic cattle breeding used in many of the least developed countries is not conducive to the control of animal diseases. The development of agriculture and livestock production could considerably boost the exports of least developed to other African countries, which would then have less recourse to extra-African sources of supply, particularly for meat. As for manufacturing, the limited size of African markets shows that all countries will make considerable gains in opening up their markets and allowing the establishment of industries supplying several countries at a time. The gradual building up of complementarities can reap substantial gains from the large returns to scale and from the benefits that accrue from specialization. Common commercial ventures for exports and imports will also be of interest to the least developed countries as their current limited production and limited demand give them a very low bargaining power.

95. Technical co-operation among African States is progressing through ECA's efforts to set up links among research institutions and to organize common research and training bodies. One significant element was the establishment of the African Regional Centre for Technology in November 1977. Least developed countries have specific needs in the adaptation of technology to factor endowments characterized by the abundance of cheap labour and acute shortages of capital, skills and natural resources.

H. TRANSPORT AND COMMUNICATIONS

96. Available evidence indicates that transport capacity is grossly inadequate in the least developed countries especially in terms of import/export and rural development requirements. For the land-locked least developed countries, the lack of access to the sea compounded by their remoteness and isolation from world markets, appears to be the main factor behind their relative poverty.

97. Few African least developed countries have a railway system and where such a system exists, the rolling stock is very limited. Thus in 1976, Malawi had 39 locomotives, Ethiopia, 36, and Mali only 18. Similarly, the number of passenger carriages and waggons are limited while waggon capacity is relatively small. The average passenger-kilometres and net-ton kilometres carried in these countries are also much lower than those in the rest of developing Africa.

98. Road services tend to be the most important mode of transport in African least developed countries. Yet, in terms of motor vehicle transport capacity, these countries are relatively less endowed than the rest of developing African countries. The road network in most of these countries is likewise very much undeveloped both in terms of coverage and construction standards.

99. The land-locked African least developed countries depend almost entirely on the ports and shipping facilities of neighbouring States. Of the coastal least developed countries, only Somalia is shown in international statistics as having a large tonnage of registered shipping capacity (158,000 tons in 1977). Thus in general the coastal and island least developed countries depend on foreign shipping services for the bulk of their maritime trade.

100. Except for a country like Ethiopia, which has a well developed airline, or others which are located on important air routes, most African least developed countries have very weak domestic as well as international air links. Both passenger-kilometres and freight-kilometres carried are generally relatively very low in these countries.

101. From a comparative analysis with other developing regions of the world, every African country has serious transport and communications problems of some sort, but what marks the difference between other countries and the African land-locked least developed countries is "transit", which is defined as the movement of goods and people between one country and another across the territory of one or more intervening States by any means of transport. While the bulk of international trade is transported by sea (and by definition, land-locked nations have no coastal frontier), access to the sea is synonymous with access to world markets. Transport across the ocean differs from other forms of transport in that it does not physically traverse the territories of intervening States: land transport crosses national frontiers and physically traverses the territories of intervening States and air transport requires rights to use the air-space of other nations.

102. There are about 17 important transit transport corridors on the African continent, six on the east coast; 5 each on the central and western coasts, and one on the northern coast; yet each corridor is unique in terms of environment and physical conditions (such as distance and topography); modes of transport in use (road, rail, water, etc.); technological conditions of the mode(s) in each corridor (types of equipment, managerial capabilities, maintenance); economic conditions (government policies, traffic composition and volume and competition); political conditions (within the individual inland and transit country(ies) and relations between/among them); and the local ability to identify and resolve problems. There are certain inherent disadvantages in being a land-locked least developed countries which require co-operation between the land-locked and coastal countries and considerable assistance from international community in bearing the high cost of improving transit and port facilities. Here international assistance is of particular importance since most of the routes used by inland countries pass through neighbouring transit countries where they do not have high national priority. They consider them of lesser importance. International financial institutions should change the profitability criteria in road project financing so as to keep in mind the benefits of both the land-locked and the coastal countries. It also seems that a regional fund should be created for improved access to land-locked countries.

103. In addition to the general transport inadequacies common to all African least developed countries, land-locked least developed countries are saddled with difficulties associated with transit transport operations. These difficulties pertain in brief to high transport costs resulting from inefficient transport management, use of inadequately skilled labour, directional and seasonal traffic imbalances, unsuitability of vehicles and handling equipment use and the lack of adequate basic facilities. Moreover many land-locked countries are dependent on one or two transit routes. Many avoidable transport costs arise from inadequate and unreliable communications facilities such as telephone, telegraph, teletype and postal services at principal points along transit routes. Institutional requirements and formalities imposed by transit countries often tend to be cumbersome and to reduce transport performance. There is usually a proliferation of documents, unstandardized procedures and excessive administrative requirements. The kinds of cargo handled are severely restricted by the facilities on the transit route and consequently advantages of economies of scale are lost and costs cannot be reduced or services improved. ECA can assist by convening regular meetings among land-locked and transit African countries.

I. HUMAN RESOURCES: EDUCATION, EMPLOYMENT, INCOME DISTRIBUTION AND MASS POVERTY

(a) Introduction

104. As far as manpower availability is concerned the least developed countries are characterized by extreme inadequacies, a heavy dependence on outside expertise and very inadequate infrastructure to educate and train the numbers required for development activities. They suffer from slowly expanding economies and rapid population growth which make it difficult for a good part of their increasing labour force to be gainfully employed in productive activities. They have large rural/subsistence communities and a rural exodus whose magnitude is exaggerated by the smallness, and therefore the inability of the urban/formal economic sector to absorb most of the migrants.

105. In addition, all least developed countries share the same plight with regard to low calorie intake, high illiteracy rates, high incidence of disease and low level of political participation.

(b) Education and training

106. The education and training systems existing in these countries attest to the shallow base with which the least developed countries are handicapped, which severely prevents them from turning out the quality and quantity of manpower needed to tackle their problems. One common index of a country's level of human resource development is its illiteracy rate. In 1975, out of all the African least developed countries, only Lesotho and the Comoros showed an illiteracy rate below 50 per cent of the populations (41.4 per cent and 41.6 per cent respectively). For the others, the figures ranged between 63.1 per cent in Cape Verde and 98.5 per cent in Somalia and the Upper Volta with an average for all the countries the group of 81 per cent 6/. The Niger, a special case, has 98.6 per cent of its population of 4,600,000 illiterate. This index, in addition to the other social indices, only underlines the fact that these countries as a group are more disadvantaged than others within the region

107. The structures to improve this and other human resources defects within these countries do not seem to be adequate or strong either. In spite of the commitments undertaken at the 1961 Addis Ababa conference and other African conferences of ministers of education to endeavour to reach certain targets for qualitative and quantitative improvements in respect of the continent's human resource situation, first level enrolment ratios in education institutions average only 6.1 per cent, ranging from 15.4 per cent in Lesotho to 1.8 per cent in the Niger. Second level enrolment in 1973 is even more depressing. Only four countries within the group were found to have enrolment rates above

6/ UNESCO Statistical Yearbook, Paris, 1977.

1 per cent of their population, the best of the rest being the Sudan at 0.93 per cent and the lowest being Rwanda with 0.10 per cent. Approaching the apex, the pyramid becomes very narrow. Third level education shows an enrolment rate of 0.35 per cent for Benin which is the highest, and at the bottom of the scale (for those 15 countries with a university), Burundi and Mali with 0.01 per cent 7/.

108. The quality of education offered within educational institutions in the least developed countries are still biased in favour of the colonial, non-scientific, non-technological, liberal arts programmes. This type of bias manifests itself mostly at the end of second level when manpower is to be channelled into areas of training for specific economic activities. At the tertiary level, the figures indicate that in four of the least developed countries, only 20 per cent of the student population was found in such fields as science, engineering and technology; the remainder was in the liberal arts. In comparison, Nigeria and Algeria had more than 35 per cent of their student population in science, engineering and technology. The country with the highest percentage of its student population pursuing vocational/technical education was Benin with 0.29 per cent of its stock of human resources being prepared for occupations in these fields as opposed to 0.02 per cent for Ethiopia, The United Republic of Tanzania and Mali and 0.04 per cent for Rwanda, the Upper Volta and Uganda. 8/ At this level, provisions for training engineers, scientists and technologists are grossly inadequate. Only one country has facilities for agricultural engineering and food processing technology, three for civil engineering, none for chemical engineering, one for electrical engineering, three for mechanical and production engineering, two for energy and power production and none for water resources engineering, mining and geological or metallurgical engineering. 9/ Thus in spite of the fact that only nine of the countries involved have semi-arid Sahelian conditions, all 20 least developed countries have agricultural/food production and processing problems. They all need manpower with mechanical and industrial/technological engineering skills and most need local know-how in mining and minerology. These needs, however, are for high-level technological manpower. For the middle-level categories, vocational and technical training concentrates mainly on production of craftsmen and artisans. A recent ECA study 10/ shows that none of these countries have the institutions or the capability to turn out technicians of the high-and middle-level categories with the result that their stock of local manpower of this type and level is pitifully small. For the moment, it can be argued that needs in this area are not urgent since the level of industrialization of these countries is extremely low. However, this in itself is debatable.

7/ Ibid.

8/ Ibid, table 5.2

9/ UNESCO: African Network of Institutions Engaged in Scientific and Technological Research, UNDP Intercountry Programme Project, December, Nairobi 1976, Annex I.

10/ Feasibility study mission report on the establishment of an African Institute for Higher Technical Training and Research, Addis Ababa

109. Efforts to turn out manpower rapidly and the frustrations caused by the failures of the normal education and training systems in these countries have caused non-formal education to receive great recognition in a number of least developed countries. It is, therefore, not surprising that the most developed non-formal education programmes in Africa are found in such countries as the United Republic of Tanzania, Botswana, the Upper Volta, Ethiopia and Mali.

110. The greatest promise of non-formal education is that it can respond to immediate needs for the acquisition of occupational/developmental skills in a relatively short time period. Its objectives are specific, short-term and functional; and because it relies on the most essential basic instructional materials it operates efficiently with few capital facilities and a minimum of financial overheads.

111. In Botswana, non-formal education was used to train large numbers of rural craftsmen and artisans in the United Republic of Tanzania, Ethiopia, the Upper Volta, Mali and other countries, such education is providing functional literacy and other skills to the majority of the disadvantaged populations in rural areas such as rural entrepreneurs, out-of-school youth, peasant farmers and women. Although non-formal education largely concentrates on rural dwellers, there is need for such education to be expanded to cover the provision of urgent skills for industry, technology and commerce. In the United Republic of Tanzania, adult and non-formal education programmes were geared to provide agricultural and literacy-related skills to 8,253,653 people in 1973 and only 431,121 received training in commercial and technical skills.11/ In Botswana, it was through non-formal education methods that, between 1969 and 1975, over 1,500 people received training in building, carpentry, welding, farming, electrical trades, dressmaking, textiles and mechanics 12/.

112. While efforts are being intensified to improve and create facilities for education and training, the all-important factor of planning and integration of programmes is singularly lacking. Although manpower planning offices and departments exist in a number of least developed countries, their function is mainly to complement the work of departments of education in the provision of scholarships and in monitoring students in institutions, with a view to planning jobs for them after graduation. In all the countries concerned, manpower planning needs to be more rationally integrated into national socio-economic development planning. As it is, provision of skills does not necessarily progress with or correspond to changes and adaptations in the socio-economic development of these countries.

11/ Kassam, Yusuf O. - The Adult Education Revolution in Tanzania, Shungwaya Publishers, Nairobi, 1978, p. 18.

12/ Report from Sweneng Hill, Uppsala, Sweden, Dag Hammarsjold Foundation, 1974, pp. 59-60.

(c) Labour and employment

113. Of the total 44,782,000 persons who constitute the active labour force in the least developed countries, 38,172,000 are engaged in agricultural occupations, 4,069,000 in the services sector and only 2,446,000 in activities described as industrial 13/. While the labour force in the least developed countries is growing at an average of approximatel 1.9 per cent per annum, activity rates are projected to decline from an average of some 48 per cent to 42 between 1980 and the year 2000. 14/

114. As of now, the least developed countries appear to be facing serious problems of increasing unemployment and underemployment emanating from the fast-growing labour force. As agricultural conditions worsen in the rural areas and as the ensuing migration to urban areas intensifies, unemployment problems are exacerbated by the increased output of unskilled literates and semi-literates from formal educational institutions waiting at the gates of the labour market. Thus, for example, a draft JASPA study on Development, Employment and Equity Problems in Lesotho predicted that education and training systems would turn out 10,000 unemployable youths in 1980. 15/ In a similar study on the same country, it was revealed that, because of the slow expansion of the economy, Lesotho's labour force engaged in cash employment showed a consistent increase of 1 per cent every three years between 1968 and 1973; in other words, the increase of job creation opportunities for its increasing labour market was at a rate of 0.33 per cent per annum.16/ A similar unpublished 1977 study on educated unemployment in the Gambia, projected that total number of unemployed would approach 10,000 by 1985. This bleak situation applies in varying degrees to all the least developed countries simply because their economic expansion is among the slowest in the world and consequently they are unable to absorb their growing labour force into productive employment activities.

115. Some of the measures envisaged for dealing with the labour and unemployment situation are rather drastic. In the Gambia, the Minister of Education in 1967 hoped that as more and more school leavers found it impossible to be gainfully employed, they would go abroad "to seek their fortune" 17/. In Lesotho, where "only about 3 per cent of the households could earn their living from agriculture and/or livestock production" in 1973, and where only 22,000 persons were engaged in wage employment 18/, the massive export of labour into the mines and industries of the Republic of South Africa was the only solution found to what seems to be a chronic unemployment problem. While these 22,000 persons were in wage-employment in Lesotho, there were 197,000 of their compatriots

---

13/ ILO Labour Force Estimates, Vol. II, Geneva, 1977.

14/ Ibid.

15/ ILO Draft Study on Development, Employment and Equity Problems in Lesotho, JASPA, Addis Ababa, 1979, p. 188.

16/ Winai-Stron, Gabriele-Development and Dependence in Lesotho, Uppsala, 1978, p.23.

17/ The Gambia Government, White Paper on Education, Banjul, 1967.

18/ Winai-Stron, Gabriele, Development and Dependence in Lesotho, op.cit., p. 27.

employed in the mines of South Africa. Malawi joins Lesotho in solving its unemployment problems through massive exports of labour. For most of the other countries the pattern is very similar. Unskilled, semi-skilled and even skilled labour from Mali, Benin, Chad the Upper Volta abounds in French factories and services. In some cases, surplus labour remains within Africa such as the Upper Volta workers in Ghana and Nigeria, the Cape Verde nationals in Senegal, the Guineans in Senegal, the Gambia and Sierra Leone and the Ugandans in Kenya, etc.

116. The projections for labour and employment in the least developed countries are as disturbing as are those for economic growth and development. Rational plans and proposals need to be thought out to stimulate economic activities which would lead to employment generation and job creation for the increasing unemployed.

(d) Income distribution and mass poverty

117. The Survey of Economic and Social Conditions in Africa, 1978/1979 19/ includes a special study entitled "Economic growth, employment, income distribution and mass poverty in African developing countries". The object of the special study is to examine the magnitude and trends of the above mentioned indicators during the past two decades with a view to assessing the efficacies of policies pursued in the light of accepted theories and recommendations. The study reviewed the information available for 19 developing African countries, of which seven were least developed.

118. The object of this section is briefly to analyse the available data on the least developed African countries with particular emphasis on social justice, income distribution and mass poverty.

119. The paper entitled "Long-term development trends in the least developed African countries" 20/ briefly reviewed the development trends since 1960. As a result of the poor growth in per capita income, the extremely low growth rates of agricultural and manufacturing output, the low intensity of farming and the fall in the employment-output ratios in manufacturing, the demand for labour increased only marginally in the least developed countries while the labour force was increasing at an average annual rate of 1.9 per cent per annum with the result that the number of unemployed, underemployed and those working on low productivity jobs was increasing substantially. Following the spread of formal education during the last two decades an increasing share of the unemployed are composed of educated youth.

19/ E/CN.14/743.

20/ ECA/CONF/LDCs/2.

120. The evidence available on least developed countries shows that the share of unemployment and under-employment in the total labour force is decidedly larger than the 45 per cent of total labour force estimated by ILO for developing Africa as a whole. The share is also larger if persons working on low productivity jobs are taken into account.

121. In this section an attempt is made to bring together the information available on income distribution in both least and non-least African developing countries with a view to making some comparisons. The data which is available for the 19 African countries (seven least developed and 12 non-least developed countries) is subject to serious limitations with respect to coverage and timing. However, while some attempt was made to unify the classification of households into income shares it was not possible to unify the timing and coverage.

122. An over-all picture on income distribution for least developed and non-least developed countries was developed by plotting the data for the individual countries on diagrams, respresenting the individual Lorenz Curves, so as to obtain the patterns of income distribution with uniform income shares received by (a) the poorest 40 per cent of the population; (b) the middle 40 to 70 per cent; (c) the middle 70 to 80 per cent; (d) the richest 20 per cent; and (e) the richest 5 per cent of the population respectively. The over-all distribution for least developed and non-least developed countries as a whole was then obtained by weighting the country income shares by (i) their respective GDP at 1975 market prices; and (ii) their respective mid-year 1975 populations.

123. Table 11 gives the over-all picture on income distribution in the least developed and non-least developed African developing counries. For the seven least developed, total <u>per capita</u> GDP at current market prices in 1975 amounted to $US 167 or about one third of the <u>per capita</u> GDP of non-least developed African developing countries of $US 468. The Gini coefficient for the least developed countries, is decidedly lower than in non-least developed, being 0.41 and 0.40 weighted respectively by population and GDP as compared with 0.48 and 0.44 in non-least developed countries. This shows that income inequalities are less pronounced in the least developed than in the non-least developed African developing countries.

124. As pointed out above, in determining the welfare of the people of a country, the extent of mass poverty should not be determined on the basis of income distribution alone which reveals relative poverty but more so on the absolute level of the country's national income.

125. A recent ECA study classified that portion of the population with a yearly average <u>per capita</u> income of about $US 130 at 1975 current market prices as "destitute" or seriously below the poverty line while those with a yearly average <u>per capita</u> income of about $US 255 at current 1975 prices was classified as "seriously poor" or on the verge of poverty.

Table 11: Distribution of income in least developed and non-least developed African developing countries

Income groups (percentage of population)	Least developed: Population (millions)	Distribution of income (percentage) weighted by (a) Population a/	(b) GDP b/	Per capita income ($US) weighted by (a) Population a/	(b) GDP b/	Non-least developed: Population (millions)	Distribution of income (percentage) weighted by (a) Population a/	(b) GDP b/	Per capita income ($US) weighted by (a) Population a/	(b) GDP b/
Poorest 40 per cent	49	15.6	15.7	65	66	98	12.4	14.6	145	173
Middle 40-70 per cent	37	22.3	22.8	124	126	73	19.8	20.9	310	331
Middle 70-80 per cent	12	11.9	12.3	203	210	24	10.4	10.9	496	524
Richest 20 per cent	25	50.1	49.2	411	403	49	57.4	53.7	1340	1270
Richest 5 per cent	6	23.1	21.8	739	744	12	24.8	23.0	2364	2221
Total	123	100.0	100.0	-	-	244	100.0	100.0	-	-
Gini coefficient	-	0.41	0.40	-	-	-	0.48	0.44	-	-
Average per capita income				167					468	

Source: "Economic growth, employment, income distribution and mass poverty in the ECA region". A study published in "Survey of Economic and Social Conditions in Africa, 1978-1979", part I.

a/ Mid-year 1975 population.

b/ 1975 GDP at market prices.

126. Admittedly the notion of what constitutes absolute poverty varies from country to country, from culture to culture and from individual to another. At best, data on income distribution alone only give the relative position of a group of households in the total income structure and this of course does not indicate absolute levels of poverty. Hence there is need to develop norms for food, clothing etc., with a view to identifying absolute levels of poverty in order to devise appropriate measures for providing the people with their basic human needs. Considerable research is being undertaken in the United Nations family to estimate the minimum norms and minimum per capita income required to acquire basic needs. In the absence of the final results, the ECA study attempted to estimate average per capita income for those below or around the poverty line as the only available approximation.

127. Since absolute equality does not allow for differences in age, experience and the needed incentives, social justice is defined as a change in the direction of increased economic equality. However, the differences in income disparities should not be excessive and thus the object should be to achieve equality of opportunities. The apparent conflict and trade-off between growth and equity can be narrowed down by appropriate policy instruments which, unfortunately are not mastered in many African least developed countries.

128. In determining the welfare of the people of a country, two factors should be taken into consideration, the first is the absolute level of the country's national income and the second is its distribution. The most widely used methods for analysing size distribution of income are the Lorenz Curve and the Gini coefficient which have been used in the ECA study referred to above.

129. The ECA special study reveals that in African developing countries as a whole including the least developed ones, incomes on a per capita basis in the urban areas are decidedly higher than those in the rural areas, whereas disparities in expenditure are not as pronounced as those of incomes, suggesting that most of the savings are generated in urban areas and this tendency is likely to be accentuated in the future, and income inequalities are consistently more pronounced in urban areas than in the rural ones.

130. The comparative data on income distribution in the least developed and non-least developed African developing countries, limited as they are, show that those having an average annual per capita income of less than US$ 130 form 70 per cent of the total population in the least developed countries as compared with less than 40 per cent in the non-least developed countries. These are the people classified as "destitute" or those who are seriously below the poverty line. The share of population which can be classified as seriously poor, or on the verge of poverty is also substantial. Thus it can be concluded that mass poverty in the least developed countries is more widespread than in the non-least developed African countries. The average for African developing countries as a whole according to the ECA study was 40 per cent for the destitute and additional 30 per cent for the seriously poor giving a total of 70 per cent for the two groups. The share of the two groups in least developed countries is decidedly higher than the average for African developing countries and hence measures for the eradication of mass poverty are urgently needed.

131. In the least developed countries, the poorest 40 per cent of the population have an average per capita income of a mere $US 66 which is about one third the average of $US 160 obtained in the non-least developed countries. The wider spread of mass poverty in the least developed countries stems from the extremely low level of the average per capita income and not from larger inequalities in income distribution. As stated before and judging by the Gini coefficients income disparities in least developed countries as a whole are less pronounced than in non-least developed African countries.

132. Mass poverty, income inequalities, unemployment, underemployment and employment in low productivity and income jobs are associated with bad utilization of human resources. In other words, the root causes of mass poverty, income inequalities and unemployment in African least developing countries are seriously suboptimal human resource utilization and thus it is in this field that the solution to the problem of mass poverty lies. Relative poverty, of course, is a world phenomena but the destitute in the non-least developed African countries are in the minority while in the least developed African countries they are in the majority.

133. Hence the basic needs approach propounded by the ILO must be pursued urgently. For the satisfaction of basic needs together with the concommittant objective of full employment so as to allow the poverty groups to obtain an income sufficient to purchase the basic needs goods and services growth rates of GDP in future must be much larger those so far achieved by the least developed countries. A minimum of 6 per cent is required and, for this to be achieved, a new domestic economic order to pursue appropriate policies must be implemented without delay together with a new substantive programme of action for trade and external assistance. Comprehensive land reform to increase labour intensity seems to be a must and massive labour - intensive public works programmes must be enforced.

134. However, a basic needs programme that does not build up self-reliance and self-sustainment is in danger of degenerating into a global charity programme at the international level. Indeed the approach should be directed to the ability of the country itself to produce its basic needs requirements. A major contributory factor to the underutilization of human resources and the consequent emergence of mass poverty is the present international economic order which imposes serious constraints on the country's ability to expand exports, output and employment.

135. In other words, as stated in the ECA Survey of Economic and Social Conditions in Africa 1978/1979, the approach should not merely be interpreted in a narrow and static sense of increasing the availability of basic goods and services irrespective of their source and irrespective of the country's ability to expand its productive capacity and produce nationally the basic goods and services it needs. Of course, long-term optimality in resource allocation should not be concealed in the approach for short-term benefits. The pursuit of the approach should rather rest on integrated long-term strategies aimed at building up the potential strength of the nation and solving the many factors which underlie poverty.

PART II: PROPOSALS FOR ACTION IN THE 1980S

A. AGRICULTURAL DEVELOPMENT

136. In line with the African Strategy for Development in the 1980s, the Governments of African least developed countries should have as their overriding objective in the agricultural sector the attainment of self-sufficiency in food supply. This implies a substantial increase in the proportion of development resources currently devoted to agriculture, and moreover such resources should be channelled to raising yield through intensive methods including labour intensity, comprehensive land reforms, improved technology, intensive use of modern inputs, improvement of irrigation and drainage system, improved physical and institutional infrastructure such as feeder roads, and medium-scale storage as well as processing, marketing and credit facilities. Extensive methods of cultivation should also be pursued by expanding the area under cultivation.

137. Measures should be taken in conjunction with the international community to ensure a much higher degree of food security.

138. Efforts should be directed to the expansion of agricultural exports. The international community is required to make an important contribution in this area particularly with respect to the removal of non-tariff and other protective barriers to trade in agricultural commodities and in the stabilization of prices; the Governments of least developed countries themselves should pursue realistic producer pricing policies as an incentive to greater production.

B. MANUFACTURING

139. To further industrial development, the African Strategy for Development recommends the adoption of the "systematic industrial development" approach, that is to say processing units based on successive by-products should be identified, studied and implemented, making maximum use of Africa's resources. It is also recommended that the industrial strategy should be linked to a technological strategy as well as a manpower strategy with a view to developing appropriate technology and indigenous personnel. Machineries should be created for sound planning, execution, monitoring and evaluation of industrial development activities. At the same time, the present structure of trade should be improved to promote exports of African manufactures. Industrial and technological strategies also need to be harmonized among African countries.

140. For the African least developed countries substantially more ambitious programmes of industrial development would have to be undertaken. These should be centered on agro-based and agro-supported industries. In particular, it will be necessary for these countries:

(a) with strong international support, to take inventories and surveys of natural resources (agriculture, minerals and water, including human resources) in terms of market potentials and skills, and link such surveys and exploration to exploitation and development involving indigenous national/regional organizations, companies and experts and consolidate these activities with the development of national/regional capabilities in entrepreneurship, management, technology and marketing;

(b) to identify certain leading sectors or subsectors within industries based on resource endowments and concentrate on them. These selected leading subsectors should be able to spearhead, or impart dynamism to the rest of the economy with forward and backward internal linkages;

(c) to emphasize the need to develop skills, e.g. entrepreneurial, managerial and technological capabilities in innovation, formulation, implementation and operation of industrial plants, with particular reference to the use of teaching institutions;

(d) to use national universities, technical training and research institutes to supervise the development of the use of natural resources in industries or produce engineers who can develop the use of natural resources, e.g. cotton fabrics, forest products and fisheries and the use of by-products;

(e) for certain products, to capture the national, subregional/regional markets rather than focusing on developed markets for exports, especially for food, cotton fabrics, leather shoes, wood products, building materials, etc.;

(f) to create a climate for subregional/regional industrial co-operation through joint ventures, joint production of components, subcontracting, joint purchase and sales, joint training, exchange of directorates and shares, appointment of commercial representatives and agents, etc., i.e. transformation of dependence on outside forces into interdependence among regional and neighbouring countries;

(g) to promote the establishment of joint ventures or multinational corporations for joint exploration, exploitation and development of natural resources. The joint ventures or multinational corporations could be established on different patterns. The joint ventures could either be located in least developed countries, use the resource endowments of these countries or involve opening subregional and regional markets for their products, sharing common industrial training, maintenance, research product development and design facilities.

C. MINERALS, WATER RESOURCES AND ENERGY

141. African least developed countries have extensive undeveloped land areas, the geography and geology of which are as yet not fully explored. This suggests that a rich resource base might eventually be found and harnessed. A major focus of investment policies in the Substantial New Programme of Action for the 1980s, should therefore be a programme for the exploration and development of the mineral, water and energy resource potentials of the least developed countries.

142. Such a programme should have the following components for the mineral sector:

(a) Strengthening, in an integrated fashion, of the national capabilities for mineral sector planning, exploration and project identification through technical assistance missions, on-the-job training of local personnel, and institutional building;

(b) systematic surveys of national territories to identify the potential resource base;

(c) intensive exploration of known mineral occurrences;

(d) financial assistance for the development of promising mining projects;

(e) systematic exploration for non-metallic raw materials to be used in domestic industries including construction materials, raw materials for the ceramics and glass industries and raw materials for certain chemical industries;

(f) market analysis and assistance with marketing of export commodities.

143. For the water sector, activities in the 1980s should focus on improving drinking water supply and water for agriculture, industry and power; flood control; and regional co-operation in water resource development.

144. For the energy sector immediate efforts are needed to cut costly oil imports. The development of alternative sources of energy especially non-conventional sources should be promoted. The international community should assist in the development of the use of solar and wind energy especially for agricultural needs.

D. SCIENCE AND TECHNOLOGY

145. A programme of action for the 1980s in the science and technology field should focus on the following:

(a) formulation of technology policies and plans and making them an integral part of national economic planning;

(b) creation of policy instruments to encourage local innovations and facilitate rapid and less costly acquisition of technology;

(c) establishment of management procedures in the field of Research and Development for the selection of projects, monitoring the research process and evaluating results;

(d) creation of national centres for the development, transfer and adaptation of technology;

(e) increasing opportunities for technical training at all levels of the formal education system;

(f) taking measures to gear training programmes to the productive needs of the economy;

(g) taking measures to broaden the training of engineers to include mastery of the practical elements of technology as well as the other related dimensions of the technology process;

(h) the organization of specific courses in the legal and technological aspects of the transfer of technology;

(i) establishment of training programmes in fields where there are acute shortages of manpower, such as production engineering, industrial design, chemical engineering, metallurgy and standardization and technical information systems;

(j) establishment of institutions for the collection, analysis and dissemination of technology information.

E. EXTERNAL TRADE AND FINANCIAL FLOWS

146. The expansion of the external trade sector of the African least developed countries is particularly important if economic growth is to be sustained and basic economic goals met. This is borne out by the high elasticity of both imports and exports of goods and services relative to GDP (1.71 and 1.04 respectively in 1970-1977).

147. The report of the Ad Hoc Group of Experts on the External Trade Sector of the Least Developed Countries (TD/B/735, TD/B/AC.29.1) outlines a programme of action for the least developed countries. Trade expansion will require action first on the production system itself, then specific measures aimed at promoting trade and finally a major expansion of aid from developed countries and international organizations. The expansion of trade cannot take place without the expansion of production and will have to be seen not as a priority in itself but as a part of the general programme to improve the well-being of people in least developed countries. In this respect, it should be noted that what is needed is not only expansion of production but also structural changes in the production system since, as past experience shows, a mere increase in products will not automatically benefit producers.

148. In developing production for export high priority should be given to the agricultural sector where there is considerable potential. In particular the development of river basins and irrigation projects seems to be very promising in the Sahel countries where water is a main constraint to agricultural progress. Secondly, the mining sector where the African least developed countries have an important unexploited potential should also be given high priority, although the inventory of these resources still has to be made. Countries like the Niger and Botswana show clearly the dramatic impact that mineral resources development can have. The promotion of exports in manufactures has also to be given special attention, although manufactured goods account for a small proportion of the export mix, (only 5.5 per cent of exports in 1976). The low demand for the type of primary commodities exported by the least developed countries indicates that substantial additional value added can be made in the exports of processed raw materials.

149. Specific measures to promote exports should include: (a) assistance to countries in developing trade promotion institutions for the identification of export-related projects, the study of export potential and the identification of markets; (b) provisions for export finance and long-term sales arrangements; (c) special trade preferences including special arrangements with the Socialist countries; (d) the removal of tariff barriers which now affect exports to the major developed market economies; (e) special attention should be given by international financial institutions to the needs of the least developed countries for export finance and special credit facilities; and (f) an integrated export development plan should be formulated with international assistance for manpower development for each least developed country.

150. In order to cut import costs, there is need to set up in each country a central administrative structure at the highest level responsible for the formulation and implementation of a national procurement policy. Substantive savings are possible with bulk purchasing. At the same time it is necessary to train indigenous personnel in procurement to staff public and private organizations.

151. Intra-African trade can play a key role in the development of the trade. For exports this would require in particular promotion of the traditional exports of African least developed countries, such as cattle, meat and fish in the Sahel zone, so that preference should be granted to these over extra-African products. On the import side, efforts should be made to ensure that African least developed countries increase trade with neighbouring countries instead of relying on imports from distant sources. A key impediment to the expansion of intra-African trade is the rigidity in existing monetary arrangements. African countries need to facilitate free financial flows among themselves if trade is to expand.

152. Trade promotion measures and in particular export promotion would be ineffective without major improvements in the internal trading system of least developed countries. This implies heavy investment in the infrastructure of these countries, especially the land-locked ones. Both international and intra-African co-operation should come into play to provide the finance necessary for the development of transport networks, facilitate transit procedures and formalities and provide training for the staffing of trade organizations by indigenous personnel. In the special case of the least developed land-locked countries, common co-operative organizations linking and developing them with coastal States should be established for the purpose of developing and managing transport links of common interest. Considerable financial assistance should be provided by developed countries for these purposes as the cost involved is beyond the reach of both land-locked and coastal countries.

153. It is necessary that developed countries increase their aid to African least developed countries to levels commensurate with their development needs. During the 1980s, a fourfold increase in net disbursements of concessional assistance at constant prices so as to enable per capita concessional flows to be tripled seems essential. In 1977 prices, this would mean a total flow in 1990 of 14 billion dollars which would require each developed country to commit 0.15 per cent of its GDP to official development assistance to least developed countries during the period 1980-1985, and to increase this to 0.2 per cent during the second half of the decade. At the same time, the structure of aid should be reviewed so as to grant better terms and conditions for least developed countries. In particular, in view of the mounting external debt burden which these countries are facing existing official debt should be cancelled. Large disparities among least developed countries should be eliminated gradually so that their real needs and development potential be taken into consideration more fully in the distribution of aid.

154. While a major expansion of aid to African least developed countries is a necessity, greater efficiency of aid is an equally important objective. Important recommendations in this respect were adopted at a meeting of donor countries and institutions with representatives of the least developed countries. 21/ It was recommended that aid should be more flexible and not limited to the financing of projects, the preparation of which was time-consuming, and that administrative procedures should be simplified. Aid should be oriented more towards those sectors which involve rural resource mobilization, conservation, small-scale public works and other such areas. It was recommended that financial and technical criteria should be adapted to the conditions of least developed countries, and that in particular the financing of local and recurrent costs should be supported as far as possible by aid funds. The time-frame for assistance should be extended so as to permit long-term planning and enable least developed countries to include aid prospects in their plans. Finally, it was stressed that aid should be co-ordinated at the global level to ensure that no least developed country received less than the average for all developing countries on a per capita basis.

F. ECONOMIC CO-OPERATION

155. African least developed countries should promote and support:

(a) measures to facilitate exchanges among countries and removal of institutional, financial, monetary and other kinds of obstacles to these exchanges;

(b) measures to develop transport and communications links among African developing countries with special reference to the needs of land-locked countries;

21/ Report of the Meeting of Multilateral and Bilateral Financial and Technical Assistance Institutions with Representatives of the Least Developed Countries, 31 October to 8 November 1977 (TD/B/681).

(c) economic co-operation among neighbouring countries in co-ordination of economic policies, development plans or joint projects;

(d) technical co-operation involving the exchange of experience, common research, training of specialists in common institutions, etc.

G. TRANSPORT AND COMMUNICATIONS

156. In the programme for the United Nations Transport and Communications Decade in Africa general provisions were made regarding policy objectives and priorities as well as projects which would benefit least developed and land-locked countries. However, these were not formulated, designed and designated for the least developed or land-locked countries specifically. It is none the less obvious that in a programme of action for the least developed countries in this sector, emphasis should be placed upon the disadvantaged position and enormous transport and communications problem of the land-locked, least developed countries. This is of course not gainsaying the importance of parallel action to improve capacity generally in the various transport modes in all the least developed countries.

157. Improved transit services would certainly provide some impetus for the growth and development of the land-locked least developed countries. A special transport and communications programme for these countries should therefore aim at (a) reducing transport costs and improving services so as to increase the competitiveness of their exports; (b) reducing the delivered costs of their imports; (c) establishing transit routes for them which are reasonably free from delays and uncertainties; and (d) opening the way for export expansion.

158. It should be noted that the transit States themselves are as much part of the transport problem of the land-locked States as they are part of the solution in that some of them suffer from poor and inadequate transport infrastructure, management, and lack of equipment, etc. and are therefore unable to provide efficient services for themselves let alone for their land-locked neighbours. Transit States thus need the necessary resources (capital, management, skilled labour, etc.) to carry out the required transit tasks or sufficient incentive to divert scarce national resources to the improvement of services which would benefit their inland neighbours. Some coastal nations have moreover viewed transit trade and services as an economic activity from which they are entitled to recover full benefits at the expense of their land-locked neighbours. A great deal of goodwill on the part of the transit States is therefore also required if solutions are to be found to the transit problems of the land-locked countries.

H. HUMAN RESOURCES: EDUCATION, EMPLOYMENT, INCOME DISTRIBUTION AND MASS POVERTY

(a) Education and training

159. The disfunctional nature of education and training for the present and future human resources in the African least developed countries calls for remedial action in the following directions:

(i) liberal arts need to be de-emphasized in favour of science, engineering, technology; and the training of artisans and craftsmen needs to be decelerated with more emphasis shifted to that of technicians at the middle and higher levels;

(ii) training programmes will have to be conceived within clear and rational economic development plans and programmes, to respond to specific needs for all categories of manpower in clearly identified priority development areas;

(iii) as far as possible non-formal education and training systems, including distant and correspondence education, need to be utilized to provide urgent skills needed for specific and immediate development activities;

(iv) Because of the shortages of facilities at the national level, the least developed and neighbouring developing countries should rely more and more on the sharing of what exists and also on a pooling of resources. Thus, a country with facilities for agricultural engineering should be encouraged to share these assets with those in need of such skills;

(v) curricula in educational and training institutions need to be re-examined and also redesigned to respond to the training and skills needed for the development of the least developed countries;

(vi) technical co-operation among developing countries should be exploited as much as possible to encourage other African countries to lend assistance in the form of expertise to those least developed countries which may be in need of it and in those areas in which other Africans have more experience and are better endowed.

(b) Labour and employment

160. It goes with saying that labour and employment generation policies must be designed in line with economic planning and potentials. The following considerations must therefore be kept in mind:

(i) to stem the rural exodus, labour-intensive agricultural development projects in irrigation, soil conservation, livestock, etc. should be intensified. Not only will they stimulate the growth of the economy, but also they will provide increased opportunities for surplus labour to be absorbed in productive activities;

(ii) for industrial and non-agricultural development, training systems should be introduced to provide skills for planned and on-going economic development activities;

(iii) expertise from within and outside this group of countries should be freely utilized regardless of nationality wherever skills are needed;

(iv) the "reverse transfer of technology" should be promoted to bring back the skills and expertise operating in the developed industrialized countries so that especially in industry and services they could be utilized in relevant areas of economic development activities;

(v) manpower planning, and especially its utilization, should be more fully integrated into economic development planning and should form a more realistic part of development planning objectives.

(c) Income distribution, mass poverty and basic needs

161. The data on income distribution coupled with that on per capita income show that mass poverty is more widespread in the least developed than in the non-least developed African countries. The estimates show that the destitute (i.e. those who are seriously below the poverty line), and the seriously poor (i.e. those who are on the verge of poverty), together form a total of about 70 per cent of the total population with their share in the least developed countries being decidedly higher than the average for African developing countries as a whole. This underscores the fact that measures for the eradication of poverty are urgently needed in the least developed countries. The widespread mass poverty in these countries stems from the low level of per capita income rather than from greater differentials in income distribution. The Gini coefficients show that income distribution in the least developed countries is less pronounced than in the non-least developed African countries and the root cause of mass poverty, income inequalities and unemployment is the seriously inoptimal human resource utilization prevailing in most of the countries.

162. The African least developed countries must have much larger GDP growth rates in the future to satisfy basic needs, as propounded by ILO, together with the concomittant objective of full employment. In order to allow the poverty groups to obtain a sufficient income to purchase the basic needs goods and services, a minimum output of 6 per cent is required together with a new domestic economic order to pursue appropriate policies and a new substantive programme of action for trade and external assistance.

163. An international basic needs programme could degenerate into a global charity programme if it is not structured to encourage national self-reliance and self-sustainment. The approach should rather be directed to the ability of the country to produce its basic needs for itself. Of course, the present international order is a serious constraint enabling a country to expand its exports, output and employment, and it contributes to the underutilization of human resources. Indeed, a basic needs approach should take into full consideration the country's ability to expand its productive capacity so as to produce the basic goods and services needed nationally.

164. In the formulation of policy measures, optimality in resource allocation in the long run should not be concealed for short run benefits. It would therefore be necessary to develop integrated long-term strategies which are aimed at building up the potential strength of the nation, which will require a considerable expansion of aid to assist these underprivileged least developed countries of Africa.

(d) Integrated rural development

165. Of special significance to the African least developed countries is integrated rural development since about 80 to 90 per cent of their population is predominantly rural. With very few exceptions, there are three major characteristics of African agriculture, namely: (a) the importance of subsistence farming in the village community; (b) the existence of land in excess of immediate requirements which permits a general practice of shifting cultivation and diminishes the value of land ownership as an instrument of economic and political power; and (c) the rights of each family (both nuclear and extended) in a village to have exclusive access to land and water in the immediate vicinity. However, over the years low productivity subsistence farming has become increasingly inadequate especially with population and commercial pressures and unless this state of affairs is changed, rural dwellers will face an even more precarious existence in the future.

166. In most least developed countries there is a highly unequal structure of land ownership which is probably the single most important determinant of the existing inequitable distribution of rural income and wealth. It is also the cause of the prevailing low output and minimal economic advancement or retrogression. Indeed as a preliminary step in achieving people-oriented rural development, farm structures and the land tenure patterns should be adapted to the dual objectives of increasing food production and promoting wider employment and the distribution of the benefits of agrarian progress. In the least developed countries, labour had a much more significant role in the expansion of output than land. Combining these results for least developed countries the elasticity of output with respect to labour is 0.88 while that with respect to acreage is 0.36. This highlights the importance of increased labour intensity in increasing production through land distribution and comprehensive land reform system. Of course, land reform is likely to be ineffective and perhaps even counterproductive unless there is a corresponding change in rural institutions that control production, government supporting services, and government pricing policies with regard to both inputs and outputs.

167. Rural development itself should be viewed in the broader perspective of far-reaching transformations of economic and social structures, institutions and relations and processes in the rural areas. Among these broader objectives are the creation of more employment opportunities both on and off the farm; more equitable access to arable land; more widely distributed improvements in health, nutrition, and housing; and a broadened access to the kind of formal (in-school) and non-formal (out-of-school) education for adults and children that is of direct relevance to the needs and aspirations of rural dwellers. The types of education required can be grouped under four main

headings, namely (i) general or basic education, (ii) family improvement education, (iii) community improvement education and (iv) occupational education.

168. Planning for successful integrated rural development programmes entails short-, medium- and long-term packages of practices. In the short term, practices which will help to increase economically profitable and low-risk agricultural production include irrigation and well-digging projects to provide additional water for agriculture and domestic activities, conservation and road improvement projects; improvement of health, nutrition and housing; wider access to formal and non-formal education; improvement and introduction of appropriate technology which can directly benefit the rural poor; creation of more employment opportunities both on and off the farm; introduction of such farm inputs as improved seeds and fertilizers; improvement of the system of project planning and implementation; and finally reorganization and upgrading of rural institutions that control production, government supporting services, and government pricing policies.

169. In the case of long-term planning, input delivery, research, credit and other systems should be extensively revised so as to backstop new project requirements. Long-run success will depend on proper planning, institutional restructuring and reforms for both production and social services.

170. In the fields of youth and social welfare, it appears that in spite of praiseworthy or commendable efforts in the least developed countries stress should be laid on national youth policies and programmes geared to integrating young people fully in national development plans and national development; youth national services; on education (both formal and non-formal); training in general and in particular vocational training with the view to providing skills and qualifications aimed at offering job opportunities to promoting employment for people, stopping unemployment and narrowing the exodus or migration of youth towards cities and urban centres; social security schemes or programmes; family welfare programmes or education; functional adult literacy, which means in fact non-formal education or training for youth and schools for social workers and seminars for training youth and social leaders, etc.